

FINAL REPORT
CONCEPT DEVELOPMENT OPTIONS
FOR
PARTRIDGE ISLAND

Prepared for:

**New Brunswick Department of
Tourism, Recreation and Heritage**

Prepared by:

The DPA Group Inc.

In association with:

**Fiander-Good Associates Ltd.
Monenco Maritimes Limited
and
Daniel K. Glenn Ltd., Landscape Architects**

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EXECUTIVE SUMMARY

This report presents the concept development options for Partridge Island. The study was originally intended as a concept development and feasibility study of Partridge Island, however, it was suspended by the Steering Committee prior to completion of all study phases due to a lack of implementation funding and insufficient opportunity for private investment.

This study included an intensive consultation process, with interviews conducted with representatives of approximately fifty interest groups and the conduct of an open house public meeting. The study also involved a tourism marketing assessment; resource assessment, assessment of visitor potential; theme and development options.

The following presents the key finding of this study:

CONSULTATION

Virtually all interviewees in the consultation phase were in favour of some type of Tourism Development of Partridge Island. Development of the Island was of special interest to the Irish Canadian Cultural Association which stressed the significance of Partridge Island in symbolizing the faith, determination and hard work of the Irish and the Island's role in Irish immigration.

Development of Partridge Island is also of special interest to groups associated with the navy and military, as well as those interested in the hospital and medical aspects.

The business community expressed an interest in the development of commercial attractions on Partridge Island, however, most other groups indicated that commercial development should be complementary to other types of development, not attractions in itself.

Tourism Market Assessment

Visitation statistics have shown that tourism has been growing in Saint John. Between 1981 and 1983, the number of non-resident parties visiting Saint John increased from 182,428 to 234,794; this represents a 28.7% increase. The number of non-resident parties staying overnight increased from 43,122 to 52,463; that is, a 21.7% increase. As well, Tourist Bureau statistics have revealed that visitors registering at tourist centres in Saint John have also increased; a 57.7% increase between 1980 and 1986.

A significant and growing market in Saint John is the convention market. Between 1981 and 1985, the number of conventions increased from 65 to 153, a 135% increase. Motor coach tours are also a growing market. Between 1979 and 1985, motor coach tours in Saint John increased from 426 to 736, a total increase of 73%. As well, Saint John's capture rate of the provincial total in motor coach tour nights increased from 23.3% to 33.8%.

Other key findings of the market assessment are as follows:

The average length of stay of non-residents in Saint John in 1983 was slightly lower than that of the province (2.37 nights compared to 2.52 nights respectively), thus implying that the City needs to provide a greater package of attractions in order to increase its visitation rates and length of stay of visitors.

Saint John's major non-resident market areas in 1983 consisted of the United States, representing 46% of total visitation; and Quebec and Ontario, which accounted for 30% of visitation. Atlantic Canada represents a largely untapped market, with Prince Edward Island, Nova Scotia, and Newfoundland accounting for approximately 20% of visitation. These market areas have important implications for targeting promotion and advertising.

RESOURCE ASSESSMENT

The purpose of the resource assessment was to determine opportunities and constraints related to the location of Partridge Island and its physical characteristics which must be dealt with in the context of interpreting the historical, cultural and heritage assets of Partridge Island.

Key finding of this phase included the following.

ACCESS

Different modes of access were assessed for safety, cost-effectiveness and appropriateness. These included helicopter, ferry, hovecraft, and hydrofoil. As well, modes which would require use of a causeway or breakwater were considered: streetcars, monorail, shuttlebus, etc. These developments would require substantial rehabilitation and upgrading of the breakwater. It is estimated that in excess of \$2 million of construction expenditures would be necessary to permit a vehicle carrying capacity roadway to be built. Notwithstanding this cost, the escarpment at the Island presents problems, as does the Fort Dufferin site, in terms of detailed land development, acquisition and access from the west end of the city.

In view of the developments costs, private sector commercial opportunities, spin-off tourism activities, it is recommended that water borne conveyance be the mode of access to Partridge Island.

INTERPRETATION THEMES

The themes which were identified as of critical importance to potential development include:

MILITARY

The Island was used in a defensive role at various periods from 1812 to 1945. Three major periods could be interpreted:

- . War of 1812
- . Mid-Century
- . Second World War

IMMIGRATION AND QUARANTINE

Partridge Island served an important role as the doorstep to Canada for millions of immigrants and was the site of quarantine stations and sick houses.

MARINE

The importance of the Island to navigation has been recognized since the Loyalists. This theme could be pursued as its Coast Guard function will be maintained for the foreseeable future, thus affording an opportunity to establish a link between the past and present.

VISITOR POTENTIAL

Visitor forecasts have been prepared for two scenarios: The first scenario assumes access to Partridge Island by boat only; the second scenario assumes access by some form of fixed link using the existing breakwater.

The potential visitation to Partridge Island under boat access scenario was estimated by means of a comparative analysis of data from other major Island based historical attractions. Applying the same capture for Partridge Island as experienced for Alcatraz, San Francisco yields and estimated 19,300 potential visitors. With a modest level of development coupled with the constraints of a short season and a serious potential constraint

of a large number of days with poor visibility due to fog, a more likely estimate is in the order of 10,876 persons in the first year of operation. It is suspected that this visitation would peak at 20,447 in year 5.

FIXED LINK

In year one of the fixed link scenario, visitation is expected to reach 30,000. It is forecasted to increase to 38,139 in year 5 and decrease slightly in year 10.

INCREMENTAL VISITATION

It is important to note that the visitation estimates are based on a Partridge Islands share of total visitation to the Saint John area. It does not take into account that the Partridge Island concept itself will be destination area for certain type of tourist activity including the following:

- . Individuals interested in genealogy and family history.
- . Individuals with "roots" extending back to Saint John, notably the New England Irish Americans, but also including other groups whose progenitors had some attachment to the Island.

For these markets, support of other related attractions and activities will need to be offered in Saint John, to create a solid image of a city with multi-cultural roots and related activities.

THEME

The development of Partridge Island should maintain a focus on all three items, each re-emphasizing in its own way the Provinces "come to the sea" strategy. These items should be as follows:

PRIMARY THEME (Immigration)

"The end of a voyage, the start of a new life."

SECONDARY THEMES

Defence: "Defending our harbour, protecting our heritage."

Navigation: "The beacon in the Sea."

While the themes are in one sense unrelated, they do have the important links to the sea. The three can be woven together through the interpretive program as relating for the immigration theme - with the defensive installations being symbolic of Canada's effort to protect the progeny of the original immigrants to the Island and the navigational installments as being symbolic of the "rebirth" of the Island.

DEVELOPMENT OPTIONS

Two concept options are presented for development of the Island. These options vary most significantly in development scale and means of access to the Island. These concepts are discussed below:

CONCEPT A

Concept A is based on an estimated potential annual visitation of approximately 10,000 - 20,000 people under a boat access scenario. Concept A would consist of a number of low-key developments and site improvements. The major access point would be a wharf and ferry terminal which would be situated in the north-eastern end of the Island. General orientation would include orientation maps, a flag plan and passport station.

The majority of developments proposed an option A are related to the immigration and quarantine theme. These include an Irish Garden, Religious Service Area, Celtic Cross Monument, Infirmary/

Quarantine Reconstruction, Sick House Reconstruction and Graveyard. Developments related to the military theme include the rehabilitation of gun emplacements, observation posts, communication tunnels and ammunition stores.

The key aspects of the navigation theme for Concept A would include a fog horn, lookout, lighthouse and lighthouse keepers residence.

CONCEPT B

Concept B is based on an estimated potential annual visitation of 30,000 - 40,000 persons with a fixed link scenario. Development under the concept B scenario would be much more intensive than concept A and would include linkages on the mainland.

Mainland developments would include a visitor orientation centre at the Fort Dufferin Site, Dufferin Battery Reconstruction, and Gun Emplacement Construction. Other site improvements would include a planting screen, work access, and landscaping. A potential project which could be development downtown and linked up with the Island through the shutter service is a genealogy centre.

The majority of Island developments in concept B are related to the Immigration and Quarantine theme and include the same developments specified for this theme in concept A. Additional developments in Concept B include an immigration museum and construction of hospital barracks.

The developments related to a military theme for concept B include rehabilitation of gun emplacements, observation posts, communication tunnels and ammunition stores, development of a military museum, Signal Hill development. Navigation theme related development include fog horn, observation deck, marine museum, and replica of 19 century ship.

COST COMPARISONS

The estimated total capital cost for access and construction of Concept A is \$1,875,500; the operating cost is \$135,480. In comparison, the overall capital cost for access and construction in concept B would be \$6,725,000 and the operating cost would be \$318,700.

1.0 INTRODUCTION

The New Brunswick Department of Tourism, Recreation and Heritage has commissioned The DPA Group Inc. in association with Fiander-Good Associates Ltd., Martec Limited, Monenco Maritimes Ltd. and Daniel K. Glenn Ltd. to conduct a Concept Development and Feasibility Study for Partridge Island.

The study was to be conducted in five phases as shown in Exhibit 1-1. This report presents a description of findings and conclusions up to the end of activity 13, Phase 4. The study was suspended during this phase due to a lack of implementation funding and insufficient opportunities for private investment. Monies needed to develop the Island were not available for the foreseeable future and private investment opportunities would most likely not be identified in further phases of the study.

The remaining tasks in Phase 4 and Phase 5 were not completed as it would be necessary to conduct these tasks again when implementation funding becomes available. This report has been written in such a way that it may easily be resumed once funds become available. Notwithstanding this, interest groups and associations could become involved in implementation of the various aspects which are outlined in this report.

1.1 The Study Area: Regional Context

The tourism sector is a major industry in Saint John and the Southern New Brunswick region. Within the study area there are numerous tourism attractions, many distinctive communities and substantial local heritage, which offer significant opportunities for a diverse and enjoyable tourism experience. Various municipal and provincial parks provide the entire area with a wide range of camping and other recreational facilities to complement the urban-oriented services and facilities available in the City of Saint John.

EXHIBIT 1-1: STUDY PHASING AND ACTIVITIES

PHASE 1: ASSESSMENT

- Activity 1 Finalize scope of study and review research design.
- 2 Collect data and review background documents
- 3 Assess tourism markets
- 4 Infrastructure assessment
- 5 Resource assessment
- 6 Solicit public input
- 7 Synthesis

PHASE 2: CONCEPT DEVELOPMENT

- 8 Develop concept options
- 9 Evaluate options

PHASE 3: DETAILED PLANNING

- 10 Prepare site plan
- 11 Prepare development strategy

PHASE 4: FINANCIAL AND ECONOMIC ANALYSIS

- 12 Prepare cost plan
- 13 Prepare visitor forecasts
- 14 Conduct financial analysis
- 15 Determine economic impact

PHASE 5: REPORTING

- 16 Prepare marketing strategy
- 17 Prepare management scheme
- 18 Final report
-

The tourism potential of the Saint John area in particular has been recognized for many years, and many of the facilities which exist - beaches, picnic sites, information centres, museums and other cultural attractions - have been developed through local initiatives. For example, in 1984 the Bi-Capital Commission established a fund raising campaign to solicit funds to renovate the Capital Theatre. An arts and cultural festival held in conjunction with the Canada Summer Games succeeded in promoting many activities in the City of Saint John in which both local residents and visitors could participate.

The region's natural and historic assets attract many summer visitors. The heritage buildings, museums, lighthouses and monuments in Saint John are just a few of the many attractions of historical interest. Within the historic community of Trinity Royal, there has been extensive restoration of old merchant houses and other buildings. Artifacts of regional and provincial interest are housed in the New Brunswick Museum.

Both the Fundy Isles Area and Saint John are major existing tourist destinations in New Brunswick, particularly for non-resident automobile parties. The 1983 Auto Exit Survey indicates that 52,463 tourism and excursionist parties visited the City of Saint John, staying a total of 122,241 nights - the third most popular city in the province. In the same period, a total of 70,070 parties visited Charlotte, Saint John and Kings Counties for a total of 168,988 nights, or 9.1% of the provincial total. Saint John is a major destination area in the province for U.S. residents and tour bus operators.

The trend in tourism development is toward the establishment of destination travel areas. The three main regional images in the provincial tourism strategy for the study area are the relationship to the sea, the coastal phenomena and the loyalist culture and heritage. Attractions must support this concept. The development plan for Partridge Island should focus on creating an attraction to complement and support the other

attractions, services and facilities in the Saint John area, and be centered on one or more of the above themes.

1.2 Study Objectives

The main objectives of the study include:

1. To identify tourism development objectives, concepts and themes based on a comprehensive assessment of the resource base and market analysis.
2. To design and assess alternative tourism development opportunities for financial feasibility, socio-economic impact, appropriate public/private investment mix and response by industry, government, interest groups and the public.
3. To refine the selected development opportunities in the form of a tourism development strategy and prepare practical and effective marketing plans.

A more comprehensive review of the Terms of Reference, has identified the following study objectives:

1. To conduct a comprehensive inventory and analysis of the human, natural, physical, cultural, historical, recreational and related tourism resources in the site area.
2. To conduct a market analysis of the tourism sector for the provincial and regional markets.
3. To identify development objectives, constraints, concepts, and themes, which are compatible with future tourism markets and with the regional resource base. These will form the major components in the preparation of and identification of project investment opportunities.

4. To assess tourism development opportunities, projects and the infrastructure required for the development of an action-oriented investment program, including the likely performance of these opportunities over a five year planning period.
5. To quantify costs associated with the site development.
6. To identify the economic impact on the study area, as well as the province.
7. To assess the viability of various development options including management requirements and appropriate mix of public and private sector investment.
8. To conduct public consultation with government agencies, tourism entrepreneurs and other interest groups.
9. If the project proves viable, to identify potential market segments and their specific product needs and to recommend an appropriate marketing plan.

2.0 CONSULTATION

The consultation phase of the study involved a two part process: personal interviews with key informants to solicit ideas on development options, and an open house public meeting to provide other interested individuals or groups with an opportunity for input.

2.1 Interviews

Interviews were conducted with representatives of approximately fifty groups. These groups were selected by the Partridge Island Study Steering Committee on the basis of their interest and potential contribution to the study. Interviewees included representatives from all levels and various departments of government, as well as a number of interest groups (See Appendix A).

An interview guide was used to structure the interview process (See Appendix B). Interviews generally lasted from 45 minutes to three hours in length, depending on available time and interest of the interviewee.

2.1.1 Interests and Concerns

The interests and concerns of interviewees regarding the development of Partridge Island varied considerably depending on the overall mandate and background of their specific groups. Exhibit 2-1 provides a summary of interests and concerns of each interviewed group.

Virtually all interviewees were in favour of some type of tourism development of Partridge Island, however a few groups doubted the viability of these developments due to climatic considerations such as fog and cool temperatures. Only one group, N.B. Historical Society, explicitly stated that it considered development of the Island to be impractical for the above stated reasons. The society stressed that greater priority should be

placed on the development of other historic sites such as Fort Latour and Fort Howe.

Development of the Island is of special interest to the Irish Canadian Cultural Association and the Saint Patrick Society both of whom emphasize a focus on Irish heritage and culture. These groups stress the significance of the Island in symbolizing the faith, determination and hard work of the Irish. Although they acknowledge the importance of other themes, they strongly believe that the major development theme should be that of Irish immigration. Other complementary developments could occur on the Island, but these groups feel that the overall development must stress an "Irish" theme.

Other groups particularly interested in immigration and heritage aspects include the Jewish community, Saint Andrews Society, Multi-Cultural Association, PRUDE, Festival Acadien and the Genealogical Society. The Loyalist groups - Saint George's Society, United Empire Loyalists and Loyalist Days Inc., are also interested in heritage aspects although Partridge Island is not of utmost significance in the Loyalist heritage.

Development of the island is also of special interest to groups associated with the navy and military. These interviewees strongly felt that the past military presence on Partridge Island should be recognized and that development of the Island should not focus on the Irish to the exclusion of other groups. The significance and development potential of the Fort Dufferin site was also stressed by these interviewees. It was suggested that the Fort Dufferin site would provide a natural entrance to the Island if a land link was developed.

Another development theme relates to the hospital and medical aspects. The Saint John Medical Society is interested in research concerning doctors who worked on the Island. The Society feels that any development on the Island should show that there was a strong medical presence.

The business community as represented by the Saint John Board of Trade and Hospitality Saint John is in favour of the development of commercial attractions on Partridge Island. Interviewees also felt that tourism development of the Island would enhance the development of the downtown core by providing a link, via harbour tours, between the downtown and Partridge Island.

While tourism potential of Partridge Island is an interest of the City of Saint John, it is not top priority. More emphasis is being placed on the tourism potential of the downtown, City Market and Rockwood Park. Various city departments stated that they are enthusiastic about the potential development, but have doubts concerning the market viability.

A few groups, including the Saint John Economic Development Council, explicitly stated that other sites such as the Fort Dufferin site should be developed as part of the Partridge Island Project.

Most groups indicated that Partridge Island should not become over developed and that commercial development should be complementary to other types of development, not an attraction in itself.

 EXHIBIT 2-1: PARTRIDGE ISLAND DEVELOPMENT INTERESTS AND CONCERNS

GROUP	INTEREST/CONCERN
Irish Canadian Cultural Association	. Development of Partridge Island is the #1 project of the association. . Partridge Island symbolizes the faith, determination and hard work of the Irish. . The Island should be developed as an Irish historical park. . Partridge Island is the "missing link" in Saint John's tourism package.
Saint Patrick Society	. In favour of development of Partridge Island as a tourist attraction, but feel that the development should focus mainly on Irish heritage and culture.
City of Saint John, Parks & Recreation Dept.	. Rockwood Park is the top recreation priority for the City. . Partridge Island would not have been included in the City's long range planning if other groups and various levels of government, hadn't taken an interest.
City of Saint John, Visitor & Convention Bureau	. Partridge Island is not one of the top priorities for tourism; higher priorities include the downtown, City Market and Rockwood Park. . Concerned that tourism attention may detract from the historical significance. . Market potential is questionable.
Saint John Economic Development Council	. Interested in the different themes associated with the Island - historical, immigration, military. . Interested in the development potential of Fort Dufferin - believes that it would be a natural entrance to the Island if a land connection could be devised.
United Empire Loyalists	. Partridge Island should be developed as a package of attractions. . The development should be open year-round.
Roman Catholic Diocese of Saint John	. Historic site for Irish Catholics. . All historic aspects of the Island must be considered. . Concerned that other historic sites in Saint John may remain undeveloped if Partridge Island becomes a focus for historical development.

EXHIBIT 2-1: (CONTINUED)

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|---|---|
| Saint John Science and Technology Council | <ul style="list-style-type: none">. Interested in Marine engineering; Fog Lights and Lighthouse aspects associated with the Island. |
| Festival Acadien | <ul style="list-style-type: none">. Partridge Island is linked to French heritage (Champlain is believed to have landed on the Island in 1604). It would be a suitable site for celebrating Acadian culture.. Concerned that the Island not be over-developed. |
| N.B. Historical Society | <ul style="list-style-type: none">. Considers development of the Island to be impractical due to climatic conditions.. Greater priority should be placed on the development of Fort Latour & Fort Howe. |
| Fundy Divers | <ul style="list-style-type: none">. Interested in old ship wrecks near Partridge Island.. Questionable potential for diving activities due to strong underwater currents. |
| Genealogical Society, Saint John Branch | <ul style="list-style-type: none">. Military and Loyalists.. Development potential of Fort Howe. |
| Harbourmaster | <ul style="list-style-type: none">. Navigational aspects.. Concerned that boat traffic to the Island may create a navigational hazard. |
| Saint John Bicentennial Committee | <ul style="list-style-type: none">. Concerned that the historical significance of Partridge Island has not been recognized.. Believes that the Island should be designated as an historical site. |
| Saint George's Society | <ul style="list-style-type: none">. Interested in the development of Partridge Island as a seasonal tourist attraction.. Saint John needs a major theme, e.g. a 50 ft. concrete effigy of a loyalist man to welcome people to the city. |
| City of Saint John, Planning Department | <ul style="list-style-type: none">. Large amount of funding is required to develop the Island as a tourist attraction.. Southern New Brunswick should be promoted as a destination area.. Partridge Island must be promoted as part of the overall package. |

EXHIBIT 2-1: (CONTINUED)

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| Saint Andrews Society | <ul style="list-style-type: none">. Interested in Scots who passed through Partridge Island.. In favour of development of the Island, but other sites have higher development potential.. Concerned that the Island does not become too commercialized. Would like to see parallel development of other sites. |
| Heritage Trust | <ul style="list-style-type: none">. Heritage aspects of the Island. |
| Historic Sites Committee | <ul style="list-style-type: none">. Supports tourist development of Partridge Island.. Partridge Island should be given priority for development as a historic site.. Partridge Island must not become a "Coney Island". |
| Preservation Review Board | <ul style="list-style-type: none">. Concern that Partridge Island not be developed to the detriment of the Preservation Area.. Partridge Island must be developed as part of the total package.. Development should not include any major rebuilding.. The Island should not be developed as a "Coney Island". |
| Saint John Medical Society | <ul style="list-style-type: none">. Interested in research concerning doctors who worked on Partridge Island.. Development should show that there was a strong medical presence on the Island. |
| Huntsman Marine Lab | <ul style="list-style-type: none">. Interested in development of an aquaculture centre on Partridge Island. |
| City of Saint John,
Engineering & Works Dept. | <ul style="list-style-type: none">. Concerned about access problems. |
| New Brunswick Museum | <ul style="list-style-type: none">. Concerned that Partridge Island is not a marketable resource. |
| Jewish Community | <ul style="list-style-type: none">. Interested in genealogical research on Jewish immigrants who landed on Partridge Island. |
| Saint John Board of Trade | <ul style="list-style-type: none">. Supportive of tourism in Saint John and of any developments which enhance the tourism marketability of Saint John. |

EXHIBIT 2-1: (CONTINUED)

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| Saint John Public Library | . Historical aspects of Partridge Island. |
| Multi-Cultural Association | . Interested in the immigration aspects of Partridge Island. |
| Pride of Race Through Education | . Interested in the heritage aspect of the Island. |
| Central Business Development Corporation | . Tourism development of the island would be an asset to the development of the downtown core if the Island is promoted as part of an overall package.
. Harbour tours could provide an important link for the downtown and Partridge Island. |
| 3rd Field Regiment, R.C.A. | . Military presence on Partridge Island should be recognized.
. Fort Dufferin site should be part of the overall development scheme. |
| Hospitality Saint John | . Interested in tourism development of Partridge Island.
. The Island should be promoted as part of the overall tourism package of the Saint John Region. |
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2.1.2 Development Suggestions

Most interviewees suggested the development of various types of facilities ranging from passive recreational to rehabilitation of buildings. Exhibit 2-2 presents a tabulation of suggested developments, and Exhibit 2-3 presents a more detailed account of suggestions by specific groups.

However, since interviewees were not explicitly questioned on whether or not they were in favour of specific developments, this information may not be representative of interviewees' attitudes towards certain developments.

The type of development which was most often suggested was a museum. In total, 14 interviewees suggested the development of some type of museum - immigration, Irish, quarantine, military and/or marine. The next most cited suggestion included rehabilitation of old structures and development of restaurants (eight interviewees suggested both of these options).

EXHIBIT 2-2: FREQUENCY TABULATION OF SUGGESTED FACILITIES

Facility	Frequency Mentioned
Historic Park	4
Chapel	1
Craft Shop	1
Immigration Museum	7
Irish Museum	1
Military Museum	2
Marine Museum	4
Genealogical Centre	5
Restaurant	8
Irish Pub	1
Immigrant Ship	2
Rehabilitation of Old Structures	8
Observation Point on Mainland	3
Interpretive building on Mainland	4
Aquarium	4
Memorial with Names	2
Oceanographic Research Centre	1
Ferry	4
Cable Car	4
Memorial	1
Shuttle Bus	2

As previously mentioned, the Irish Canadian Cultural Association envisions the development of the Island as focussing on Irish heritage and immigration. The Association is interested in the development of an Irish Historical Memorial Park which would include a memorial garden built around the Celtic Cross, a genealogical and research centre, chapel, museum, Irish restaurant and pub, re-creation of an immigrant ship, a theatre for films depicting the trials and tribulations of early life on the Island and various other smaller scale developments such as a craft shop, recreational facilities for children, photography shop (for tourists who want to be photographed in period costume). The Irish would also like to see the development of a roadway connecting the Island, but also feel that a ferry should be used as the main transportation mode during suitable weather.

 EXHIBIT 2-3: PARTRIDGE ISLAND DEVELOPMENT SUGGESTIONS

Group	Options/Suggestions
Irish Canadian Cultural Association	Irish Historical Memorial Park Including: . Chapel . Theatre - films, slides, videos depicting the trials & tribulations in early life on the Island. . Craft shop. . Museum - immigration, quarantine, military and marine. . Genealogical & research centre. . Recreational facilities for children. . Picnic areas. . Photography shop for tourists who want to be photographed in period costumes. . Restaurant. . Irish pub. . Memorial Garden built around the Celtic Cross. Other suggestions include a: . Road joining the mainland. . Re-creation of an immigrant ship.
Saint Patrick Society	. Irish Institute for researching all names of those who have passed through the quarantine station. . Walkway along the breakwater. . Museum. . Restaurants . Boat tours. . Observation point in the south end of City for viewing the Island
City of Saint John, Recreation & Parks Dept.	. Rehabilitation of old structures. . Signage . Ferry Service. . Walking tours. . Picnic facilities. . Washrooms. . Historical plaques. . Re-creation of forts and battery.
Saint John Economic Development Council	. Fort Dufferin could be used as a land link to the Island. . Rebuild hospital. . Open connecting tunnels. . Observation posts. . Fog horn and light. . Eating facilities. . Upgraded wharf.

EXHIBIT 2-3: (CONTINUED)

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| Central Business Development Corporation | <ul style="list-style-type: none">. Animation of historic and Military events.. Historic moorings from the Port could be used for boat access.. Walkway access should be improved.. Access for disabled persons.. Interpretive building.. Guns.. Tunnels.. Picnic and washroom facilities.. Shuttle bus. |
| Loyalist Days Inc. | <ul style="list-style-type: none">. Benches and washrooms.. Historical plaques - successive history.. Ferry or foot ferry. |
| Multicultural Association | <ul style="list-style-type: none">. Historical plaques.. Restore buildings.. Picnic facilities.. Camping facilities.. Ferry. |
| United Empire Loyalist | <ul style="list-style-type: none">. Restore galleries - use as a military museum.. Irish museum.. Marine museum.. Cable car.. Monorail across the causeway.. Underground restaurant.. Irish restaurant. |
| City of Saint John,
Tourism Department | <ul style="list-style-type: none">. Water recreation.. Interpretive and audio-visual presentations.. Interpretive building with plaques and signs depicting the history.. Small theatre.. Shuttle boat service. |
| Roman Catholic Diocese
of Saint John | <ul style="list-style-type: none">. Road access.. Immigration research centre.. Redevelop quarantine buildings.. Build replicas of immigrant ships. |
| Saint John Science and
Technology Centre | <ul style="list-style-type: none">. Major aquarium facility (possibly an underground facility).. Marine transportation museum.. Marine park.. Indoor theatre - films, lectures, displays. |

EXHIBIT 2-3: (CONTINUED)

Festival Acadien

- . Re-construct buildings.
- . Period costumes.
- . Boat service.

Fundy Divers

- . Tourist information about the Island should be distributed on Digby-Saint John Ferry.
- . Marine aquarium (possibly a seawater aquarium built into the harbour).
- . Marine museum.

Genealogical Society,
Saint John Branch

- . Genealogical research station.
- . Historical park.
- . Quarantine hospital could be rebuilt as an administrative centre or restaurant.

Harbourmaster

- . Island tours as part of an overall tour of the Port of Saint John.
- . Development of causeway and shuttle bus service.
- . Restaurant.

Saint John Bicentennial
Committee

- . Causeway.
- . Re-construct quarantine hospital and use as an administrative building.
- . Re-construct the fog horn.
- . Aquarium/aquaculture lab.

Saint George's Society

- . Cable car system could be used for transportation.
- . A memorial could be erected listing names of those buried on Partridge Island.
- . Mock-up model of an immigrant ship.
- . Commission artists to do works of the Island for fund raising.

City of Saint John,
Planning Department

- . Military sites should be developed as part of an overall package.
- . Aquaculture or aquarium facility.
- . Boat trip to the Island could be part of a package harbour tour.

Saint John Fundy Region
Development Commission

- . Oceanographic research centre.
- . Spawning area for salmon.
- . Marine life display.

EXHIBIT 2-3: (CONTINUED)

- | | |
|--|---|
| Saint Andrews Society | <ul style="list-style-type: none">. Museum.. Genealogical research facility.. Recreational events.. Bird watching centre.. Partial construction of buildings. Partial reforestation of the Island. |
| Heritage Trust | <ul style="list-style-type: none">. Market Partridge Island using the Ellis Island approach e.g. "Canada's Ellis Island - where the Irish Died".. Restore radar room on the Island for viewing ships in the Harbour.. Develop interpretive centres. Develop Saint John as an urban park.. Use tramway for access.. Provide tourists with a permit and quarantine certification when they land on the Island. |
| Historic Sites Committee | <ul style="list-style-type: none">. Development of roadway on the breakwater for use of minibus.. Rebuild hospital.. Re-construct former military facilities.. Fort Latour site should be developed. |
| Preservation Review Board | <ul style="list-style-type: none">. Interpretive displays.. Free boat ride from historic moorings to Partridge Island.. Bus tours of Fort Howe, Martello Tower, Fort Latour sites.. Picnic and washroom facilities.. Walking tours in winter.. Use highway signs to promote the Island.. Shuttle service from Partridge Island, Fort Howe and Fort Latour. |
| Saint John Medical Society | <ul style="list-style-type: none">. Boat link.. Quarantine and health care displays as part of a museum facility. |
| Huntsman Marine Lab | <ul style="list-style-type: none">. Aquarium.. Aquaculture centre. |
| City of Saint John,
Engineering & Works Dept. | <ul style="list-style-type: none">. Enclosed pedestrian tunnel with wave deflectors.. Cable cars.. Restaurant. |
| New Brunswick Museum | <ul style="list-style-type: none">. Passive development. |

EXHIBIT 2-3: (CONTINUED)

- | | |
|---------------------------------|--|
| Jewish Community | . Erect Jewish memorial plaque listing names of Jewish immigrants who passed through or died on the Island.
. Develop Fort Howe & Fort Latour |
| Saint John Public Library | . Passive recreational use. |
| Board of Trade | . Private industry should be involved in any development on the Island.
. Boat tours. |
| Pride of Race Through Education | . The Island should be developed as a park. |
| 3rd Field Regiment, R.C.A. | . Reconstruct gun emplacements from various periods of history.
. Museum.
. Shuttle bus service. |
-

2.2 Open House Meeting

An open house meeting was convened on July 3, 1986 at 7:30 p.m. until 10:00 p.m. at the Delta Ballroom in Saint John. The purpose of this meeting was to provide Saint John citizens with an opportunity to express their opinions and concerns regarding development of Partridge Island.

Approximately 120 individuals attended the meeting. Sixteen individuals actively participated through presentations. These individuals included Mayor Elsie Wayne, Danny Britt of the Irish Canadian Cultural Association, Hugh Fitzpatrick of the Saint Patrick's Society, Harold Wright of the Partridge Island Research Project, several private citizens, a representative of a recreation facilities firm, and a local artist. Public input focussed on the following issues:

Theme: The Irish groups were mainly interested in the development of Partridge Island using an Irish theme. They stressed the significance of the Island for the Irish, the fact that Saint John is "Canada's most Irish City" and that Partridge Island could become Canada's only Irish memorial park. The funding potential of this type of development was further stressed - there are various chapters of Irish organizations across North America and approximately 45 million people of Irish descent in this continent.

A few other individuals expressed a concern that the development not focus only on the Irish theme. They stressed that other immigrant groups such as Jewish, Russian, Lithuanian and Polish should be acknowledged and other themes such as the military should also be recognized in any development.

Access: Several options were suggested: street cars, overhead trolley cars, helicopter, and ferry were discussed by the participants. Mayor Wayne indicated that street cars were available in Saint John and suggested that tracks be developed

along the causeway. Problems of salt spray for overhead trolley cars and of cost for helicopters were concerns of some participants.

Access by hydrofoil was suggested during informal discussions after the presentations.

Fort Dufferin: Concern was expressed that the Fort Dufferin site be included in long range tourism plans for the Saint John region. The point was also made that this site is currently for sale and should be purchased by the City or Province.

Recreation: A local recreation firm representative indicated an interest in developing outdoor recreation facilities on the Island. These facilities would be directed toward young children and could include babysitting services. Facilities would be similar to those provided at Rockwood Park.

Art: A local artist stated that art, such as prints of the Island, could be used for fund raising. He also displayed a painting of the Island and indicated that he could provide lithograph prints of similar paintings at special prices.

Other comments included concerns regarding the protection of the natural environment, wildlife and Island mystique.

2.3 Analysis

Based on the findings of the consultation process, the main issues which need to be addressed include development themes, scale of development, access, facilities, land linkages and sources of funding for development.

2.3.1 Themes

There are several themes which are relevant to Partridge Island. These include immigration, military, nautical and medical. Within the immigration theme are several further divisions.

Immigration

Strong support was found for an immigration theme, particularly that of Irish immigrations. Virtually all participants indicated an interest in the development of Partridge Island along an immigration theme. Very few groups, however, felt that the development should be exclusively an immigration focus; while the immigration theme was mentioned by virtually all participants, other themes were mentioned as being compatible with the immigration theme.

The Irish Canadian Cultural Association and the Saint Patrick Society were more vocal than other immigrant interest groups on how the Island should be developed. These two groups envision the development of Partidge Island as an Irish Historical Park. This development would focus on Irish immigration, heritage and culture. It would be the only one of its kind in North America. The Irish groups acknowledged the significance of other themes, however, they stressed that the main focus of development on the Island should be on the Irish theme, and that the development must have the word "Irish" as part of its title in order to be marketable.

The Jewish Community also expressed an interest in development of the Island along an immigration theme. Development suggestions of this group included a memorial plaque listing names of Jews who passed through or died on the Island and a genealogical research station.

Other immigrant groups which may be able to trace their ancestry back to Partridge Island include the French, Loyalists, Scots, Russians, Lithuanians, and Poles.

The types of development which would be amenable to all of these groups include a genealogical research centre, monuments and plaques, and an immigration museum.

Military

Military interviewees and several other participants in the consultation process felt that a military presence should be acknowledged on Partridge Island. This would be achieved through development of a military museum, reconstruction of gun emplacements, reconstruction of forts and battery, connecting tunnels or animation of military events.

Nautical

The nautical theme is mainly concerned with the fog horn, lighthouse and ships.

Medical

The Saint John Medical Society indicated an interest in the recognition of a medical presence on Partridge Island. It was suggested that quarantine and health care displays could be part of an Island Museum facility. A few groups suggested that the medical presence could be shown through a rebuilding of the quarantine stations and hospitals.

Issues

The main issues with respect to these include: theme focus, complementarity of themes, and tourist/market potential.

The tourist/market potential is a key factor in determining the suitability of different themes. What is needed is a unique experience to attract tourists. When assessing the market potential of each of these themes, the attraction and uniqueness of the Island developed along each of these themes must be considered. In this context, the military and nautical theme appear less significant as these themes have been the focus of many historical developments in the Atlantic Region. The medical theme, while less common than the previously mentioned themes, may not be a tourist draw in itself. The immigration theme may

be the most marketable theme. Other developments such as Ellis Island have clearly demonstrated the attractiveness of this theme. Irish immigration may be the most marketable of immigration themes as the Irish Immigrant Associations appear to be well organized in North America. The New Brunswick Chapter of the Irish Canadian Cultural Association has already demonstrated support for this project.

The hospital and nautical theme are complementary to the immigration theme and could be recognized within the context of the immigration theme development. The military theme is not entirely compatible with the immigration theme but could be acknowledged through historical plaques and included in a museum facility.

Rather than focus on one theme, another approach would be to acknowledge all themes through different developments.

2.3.2 Scale of Development

Another key issue relates to the scale of development of Partridge Island. Most participants in the consultation process stressed that the Island should not become overly commercialized and that development should not detract from its historic significance and "sacredness".

A few participants, however, were interested in the "grand scheme" with rebuilding of old structures and tourist attractions.

Scale of development is dependent on theme and access.

2.3.3 Access

Access was a major issue in the public consultation phase. Approximately one-third of participants felt that access should be only by boat; other forms of transportation were thought to detract from the "mystique" of the Island.

Other access options included developing a road across the causeway, cable cars, monorail, helicopter and hydrofoils. Cost and safety factors are key determinants of appropriate access facilities.

2.3.4 Facilities

Another issue involves the type of facilities to be developed on the Island. This must be viewed within the context of theme and time frame, that is, facilities suitable for development in the short term and those appropriate for long term development.

Some of the facilities suggested, such as an underground restaurant or aquarium, would require separate feasibility studies in order to assess their viability.

The development of certain facilities such as wharfage may encourage the private sector to develop other services such as harbour tours. The City has indicated a need for these types of services, although it stresses that professional operation and marketing is essential to the success of water activities; past harbour tours in Saint John have had financial problems.

2.3.5 Land Links

Several land links have been cited as being important to the development of Partridge Island by participants in the consultation process.

The Fort Dufferin site is considered to be an ideal land link if a road were developed joining the Island and the mainland. Some groups feel that the Fort Dufferin site should be purchased by the City or Province and developed as part of the overall tourism package of Saint John. The site could also be used as an interpretive centre for Island history.

Another link is Martello Tower. Some groups envision city tour packages which will include stops in the downtown, Martello Tower, Fort Dufferin and then on to Partridge Island.

The business community has indicated that ferry service between the downtown moorings and Partridge Island could be beneficial to tourism and business in the city centre.

2.3.6 Sources of Funding

Sources of funding for development include various levels of government and the private sector. Funding potential is somewhat dependent on the development theme. For example, an Irish development would most likely have a good funding potential due to interest that has already been expressed by Irish groups.

3.0 MARKET ASSESSMENT

This chapter provides an overview of New Brunswick's tourism development strategy in general and Saint John in particular. It also presents a detailed analysis of historic visitation and tourism patterns.

3.1 Province of New Brunswick

3.1.1 Provincial Tourism Marketing and Development Strategy

The draft discussion paper, A Tourist Sector Strategy for New Brunswick, presents an analysis of historic visitation to the province and concludes that tourism exhibits an overall weakness in demand and the outlook is one of slow sporadic growth. Consequently, the strategy was formulated to provide direction to government and the private sector for tourism industry development into the mid-1980's. The primary objective of the strategy is to "encourage development of the New Brunswick tourism sector in order to accelerate and realize the maximum net economic benefit to provincial residents through increased output and improved productivity in the sector". (Canada-New Brunswick Tourism Subsidiary Agreement).

The strategy adopted a three level set of program priorities as a means of rating tourism initiatives. These priorities are as follows:

1. increase direct stimulation of demand and improve plant quality;
2. stimulate development of attractions; and
3. encourage additional supply of tourist services only where needed.

Furthermore, the strategy recognizes that the greatest potential for increased tourism expenditures in New Brunswick lies in increasing the number of visitors and lengthening their average stay. Less potential exists in attempting to increase their rate of expenditure.

Accordingly, the strategy adopted the Destination Area Approach:

"A Tourist destination area is a specific area of New Brunswick which draws and retains a significant number of pleasure travellers for overnight and extended stays by virtue of its attractions. These attractions must be complemented by adequate services and facilities, population base and transportation links, the quality and scope of which are sufficient to permit successful marketing to an identified market."

The strategy identified six general regions in the province as Tourist Regions which were considered to have the highest present development and potential for development. It is in these areas where the continued development of the tourist industry is most likely to occur.

The destination area concept serves two functions:

- a) the initial attracting of the tourist; and
- b) the provision of a base from which the tourist can leisurely explore all of the features within a large surrounding area.

The strategy, however, is approximately five years old. Its general approach and recommendations are being reviewed and revised by the Provincial Government.

3.1.2 Saint John and Partridge Island

Within the Fundy Tourist Region there are three destination areas identified: Fundy National Park, the Saint John area and the Fundy Isles; the West Isles National Marine Park has also been proposed for this area. Partridge Island is part of the Saint John destination area.

3.1.3 Saint John Tourism Marketing Strategy

The City of Saint John is actively promoting tourism through its Visitor and Convention Bureau. The City's main tourism priorities are the downtown, City Market and Rockwood Park. The City is also promoting the Capital Theatre, loyalist history, and the Trinity Royal area and architecture.

The City has been promoting tourism to specific markets such as motorcoach and conventions. It has been very successful in increasing visitation of these groups, as is shown later on in this chapter.

Currently the City provides special City Tours for visitors. However, it is attempting to encourage the involvement of the private sector in special programs. Opportunities for the private sector include convention servicing and spouse programs, City Tours and Harbour Tours.

The City's Department of Community Planning and Development has also been involved in several projects aimed at revitalizing the downtown and thus enhancing the tourism potential of the city. The department is particularly interested in the tourism role and potential of the Trinity Royal Area.

The importance of tourism to Saint John was demonstrated during the celebrations of the Three Bi-Centennials: Loyalist Landing in 1983, New Brunswicks Charter as a Province in 1984 and the City of Saint John Charter in 1985.

3.1.4 Historic Visitation and Tourism Patterns

This section presents a brief review of historic visitation and tourism patterns for the province in 1980 and 1983. The analysis provides an indication of both New Brunswick resident and non-resident tourism use by focussing on: seasonality; market types and size; reasons for visit; transportation modes; accommodation used; and tourism expenditures.

Between May and October 1980, 1,214,208 non-resident parties travelled to the province. Of this total, 455,613 parties stayed overnight. In comparison, between May and October 1983, 1,112,193 non-resident parties travelled to New Brunswick, with 536,763 staying overnight. As shown, although the actual number of visitors slightly decreased between 1980 and 1983, the percentage of visitors staying overnight, i.e. the capture rate, was 48.3 percent in 1983, compared to only 37.5 percent in 1980. During 1979/80 approximately 657,000 overnight party trips were made by New Brunswick residents to destinations within the Province. New Brunswick residents travelling within the Province completed 1,687,000 person-trips in 1984. The average length of stay for non-residents was 3.17 nights in 1980 and 2.52 in 1983; and 3.0 nights for residents in 1980.

Seasonality

Exhibit 3-1 summarizes the period of entry into the province by non-resident travellers between May and October 1980 and 1983. The majority of visitors entered the province during July and August; 54.4% and 57.3% in 1980 and 1983 respectively.

The greatest percentage of person-trips by New Brunswick residents occurred during the months of July, August and September.

Market Types and Size

Of the non-resident travellers to the province the single major market is the United States. Exhibit 3-2 presents the number of non-resident visitors by region or country of origin. Visitors from the United States represented 40.3% of all visitors, in 1980, and 37.9% in 1983. Other major regions of origin included Atlantic Canada, Quebec, and Ontario.

EXHIBIT 3-1: PERIOD OF ENTRY OF NON-RESIDENT VISITORS BY
MONTH, NEW BRUNSWICK

<u>Month</u>	<u>1980 Parties</u>	<u>% of Total</u>	<u>1983 Parties</u>	<u>% of Total</u>
May	94,170	7.8	97,311	8.7
June	152,447	12.6	113,205	10.2
July	353,549	29.1	385,948	34.7
August	307,655	25.3	251,569	22.6
September	185,085	15.2	151,681	13.6
October	121,328	10.0	112,479	10.1
<u>TOTAL</u>	<u>1,214,234</u>	<u>100.0</u>	<u>1,112,193</u>	<u>100.0</u>

Source: New Brunswick Department of Tourism, Auto-Exit Survey
1980 and 1983

EXHIBIT 3-2: MARKET TYPES AND SIZE, NON-RESIDENT VISITORS,
NEW BRUNSWICK

<u>Place of Origin</u>	<u>1980 Parties</u>	<u>% of Total</u>	<u>1983 Parties</u>	<u>% of Total</u>
Atlantic	299,447	24.7	245,719	22.1
Quebec	228,476	18.8	225,586	20.3
Ontario	153,017	12.6	167,252	15.0
Western	25,986	2.1	32,952	3.0
United States	489,120	40.3	421,055	37.9
Foreign	18,162	1.5	4,735	0.4
Unknown			14,886	1.3
<u>TOTAL</u>	<u>1,214,208</u>	<u>100.0</u>	<u>1,112,185</u>	<u>100.0</u>

Foreign and "unknown" collapsed together

Source: New Brunswick Department of Tourism Auto Exit Survey,
1980 and 1983

Reasons for Visit

The major reasons for visit by resident and non-resident visitors is summarized in Exhibit 3-3. The difference in the travel characteristics of the two groups is emphasized in the Exhibit. While visiting friends and relatives is clearly the dominant reason for residents (accounting for 53.1% in 1980 and 36.2% in 1984), it only accounted for about 20% of the non-resident reasons. The data also shows that non-residents were more likely

EXHIBIT 3-3: REASONS FOR VISIT, RESIDENT AND NON-RESIDENT TRAVELLERS, 1980, NEW BRUNSWICK

<u>Reason</u>	<u>1979/80 Resident %</u>	<u>1984 Resident %</u>	<u>1981 Non-Resident %</u>	<u>1983 Non-Resident %</u>
Business	11.6	14.5	5.8	4.9
Shopping	2.8	--	9.1	7.0
Sightseeing	14.3	--	24.8	37.5
Visiting Friends/ Relatives	53.1	36.2	19.7	20.3
Recreation	12.0	--	1.3	1.5
Attend Event	3.4	--	1.2	0.6
Passing Through	--	--	23.5	22.5
Owned Cottage	1.5	--	0.8	.7
Other	1.3	49.3	13.8	5.0
<u>TOTAL</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Source: New Brunswick Department of Tourism, Domestic Travel Survey, 1979/80, and Auto-Exit Survey, 1980, 1983, Canadian Travel Survey, 1984

to travel to New Brunswick for sightseeing in 1983 than was the case in 1981 - 37.5% and 24.8% respectively cited sightseeing as their reason for visiting.

Transportation Modes

The major transportation mode utilized by both resident and non-resident travellers was the passenger car. Of resident travellers, over 90% used the car in both years; and of the non-resident travellers, 87.1% and 84% respectively used the automobile in 1981 and 1983. Another major mode utilized by non-residents were camper trucks and vans - 6.5% and 9.4% respectively in 1981 and 1983. For residents, train and bus combined accounted for about 5% of all modes in 1980 and 1984.

Another significant transportation mode utilized by non-resident travellers is bus tours. In 1985, 2,181 bus tour nights (defined as one bus per night) were spent in the province. Assuming an average number of persons per bus of 40 and an average party size of 2.5, this would represent 34,896 party nights.

Accommodations

The type of accommodation used by resident and non-resident overnight travellers is presented in Exhibit 3-4. It is interesting to note that the difference between resident and non-resident travellers is not very significant in any of the accommodation types. In 1980, Residents were much more likely to stay with friends and relatives in 1984 than they were in 1980 - 63% compared to 50%. This may be compared to 45% of non-residents in 1980 and 1983.

EXHIBIT 3-4: ACCOMMODATION UTILIZED NEW BRUNSWICK (000's of NIGHTS)

Type	Resident Nights		Non-Resident Nights		% OF		TOTAL	
	1980	1984*	1980	1983	1980	1984	1980	1983
Hotel/Motel	247.5	244	304.6	403.7	15.7	10.8	20.1	23.3
Friends and Relatives Homes	782.0	1420	692.5	787.4	49.6	63.1	45.7	45.4
Campgrounds	248.2	188	245.3	312.9	15.8	8.4	16.2	18.0
Cottage	134.3	179	134.6	180.7	8.5	8.0	8.9	10.4
Tourist Home	--	--	6.4	6.3	--	--	0.4	.4
Hunting/Fishing Lodge	--	--	52.9	7.2	--	--	3.5	.4
Other	163.9	220	79.6	36.8	10.4	9.7	5.2	2.1
TOTAL	1,575.9	2251	1,515.9	1,735.0	100.0	100.0	100.0	100.0

* Only available in person-trips, number of persons per party was not available.

Source: New Brunswick Department of Tourism, Domestic Travel Survey, 1979/80; and Auto-Exit Survey, 1980.

Tourism Expenditures

Tourism expenditures by resident and non-resident parties, by category, are summarized in Exhibit 3-5. Total expenditures in 1980 were \$54.1 million for residents and \$79.4 million for non-residents. In 1983, total expenditures for non-residents were \$145.4 million and \$105.3 for residents in 1984. Two of the largest expenditure categories were food-related and transportation.

3.2 Saint John Tourism Infrastructure

The analysis of tourism infrastructure and use within Saint John CMA is divided into three broad areas:

- . an analysis of the tourism plant;
- . a review of historic visitation to Saint John, accompanied by an analysis of capture; and
- . an analysis of tourism markets and patterns of use.

3.2.1 Tourism Plant

The tourism plant comprises: accommodation, food, transportation and retail facilities.

Accommodation

Tourism accommodation facilities, by type in Saint John, are summarized in Exhibit 3-6. The exhibit describes hotel/motel facilities, campgrounds, and tourist homes. The peak season has been assumed to extend from June to September (a 122 day period) for hotels and motels. The campground season is also 122 days, stretching from June to September. The shoulder season includes May and October, while the off season pertains to the remainder of the calendar year.

EXHIBIT 3-5: TOURISM EXPENDITURES BY CATEGORY, 1980 NEW BRUNSWICK (\$000,000)

Category	EXPENDITURE		% OF TOTAL			
	1980 Resident (\$)	1984 Resident (\$)	1981 Non- Resident (\$)	1983 Resident	1984 Resident	1983 Non- Resident
Accommodation	8.8	11.4	12.7	22.6	16.3	10.8
Restaurants	17.0	26.1	18.7	34.4	31.4	24.9
Food Stores			7.1	15.6		8.9
Transportation	11.5	33.7	20.5	41.0	21.3	25.8
Recreation and Entertainment	3.7	7.1	3.8	6.0	6.8	4.1
Other	13.1	27.0	16.6	25.8	24.2	20.9
TOTAL	54.1	105.3	79.4	145.4	100.0	100.0

Source: New Brunswick Department of Tourism, Domestic Travel Survey, 1979/80; and Auto-Exit Survey, 1980, 1983; Canadian Travel Survey, 1984.

EXHIBIT 3-6: TOURISM PLANT, ACCOMMODATIONS - SAINT JOHN

Average Number of Accommodations Available:

	<u># Facilities</u>	<u># Units Peak Season</u>	<u># Units Off-Season</u>
Motels/Hotels	27	1,424	1,391
Campground Sites	2	325	---
Tourism Home Units	4	15	9

Within the Saint John metropolitan area, 27 motel/hotel facilities are in operation providing an average of 1,424 units during the peak season. During the off-season, approximately 1,391 units are available.

As a general indicator of the quality of hotel/motel accommodation, 17 facilities have been "approved" by at least one of the AAA, CAA, HNB or DAA.

Campgrounds

There are 250 campsites available at the City-operated Rockwood Park. As well, 75 sites are available at St. Martins, Saint John County.

Restaurants

There are a total of 148 restaurants within the Saint John CMA. Of this total, 11 restaurants are part of either hotel or motel facilities.

3.2.2 Historic Visitation

Four sources have been used to assess tourism traffic flows through the Saint John City and the Fundy Region:

- 1) Auto-Exit Survey, 1980 and 1983;
- 2) Domestic Travel Survey, 1979/80;
- 3) Canadian Travel Survey, 1984; and
- 4) Saint John Visitor and Convention Bureau Statistics 1980-1986.

Resident and Non-Resident Tourist Traffic Flow

Exhibit 3-8 summarizes resident and non-resident tourist traffic flow for 1981, 1983/1984.

EXHIBIT 3-8: TOURISM TRAFFIC FLOW AND CAPTURE - SAINT JOHN CITY

<u>Traffic Characteristic</u>	<u>1981</u>	<u>1983/1984</u>
Non-Resident Automobiles (May-Oct)	182,428	234,794
Non-Resident Parties staying Overnight	43,122	52,463
Non-Resident Capture	23.6	22.3
Average Length of Stay (Nights)	N/A	2.68
Resident Person Nights, Fundy Region	N/A	457,000
Average Length of Stay (Nights)	N/A	1.4

Source: New Brunswick Department of Tourism/Auto Exit Survey, 1981-1983; and Canadian Travel Survey, 1984.
N/A = Not Available.

Non-Resident Traffic

In 1983, 234,794 non-resident parties travelled through Saint John. Approximately 40% of these parties entered New Brunswick at St. Stephen and nearly 30% entered at Aulac. Approximately 10% entered at Tormentine and 11% entered via the Port of Saint John. The non-resident capture, or those parties staying overnight in Saint John has fluctuated only slightly since 1981 - 23.6% in 1981, and 22.3% in 1983. In 1983, approximately 52,463 parties or 133,781 persons stayed overnight. The Auto-Exit Survey reports that for the City of Saint John, visitors stayed an average of 2.68 nights in 1983.

Resident Traffic

In 1984, the Canadian Travel Survey reported that 327,000 person trips were made to the Fundy Region. This region is defined as the Fundy Tidal Region in the New Brunswick Tourist Sector Strategy and includes the Fundy Isles, Saint John and Fundy Park destination areas. This represents approximately 20% of all person-trips made in the Province by New Brunswick residents.

Tourist Bureau Visitation

Exhibit 3-9 shows a tabulation for visitation figures for three tourist centres in Saint John. These figures represent registration of visitors at tourist information centres, not the actual number of visitors in Saint John.

However, Canadian studies have shown that approximately 10% of visitors use tourist information centres. Visitation rates can reach 25% where centres are located at special attraction sites such as Reversing Falls (Saint John Visitor and Convention Bureau).

EXHIBIT 3-9: VISITOR REGISTRATION FIGURES FOR SAINT JOHN TOURIST INFORMATION CENTRES

<u>Year</u>	<u>Number of registered visitors</u>
1980	27,131
1981	28,327
1982	63,093
1983	136,656
1984	114,010
1985	113,180
1986	99,475

Between 1980 and 1985 the number of visitors which have registered at tourist information centres in Saint John have increased from 27,131 to 113,180; a 317% increase.

3.2.3 Tourism Markets

Drawing from the Auto Exit Survey, Domestic Travel Survey, and Canadian Travel Survey, this section presents a brief analysis of the tourism characteristics of the market in Saint John Area.

Seasonality

Exhibit 3-10 presents the period of entry for non-resident travellers for 1980. It is apparent that the dominant months are July and August with 56.9% and 57.9% of total overnight parties in 1981 and 1983.

Market Areas

There are two principle tourism markets: New Brunswick residents and non-resident travellers. As was indicated previously, 327,000 person trips were made to the Fundy Region in 1983. No data is available on the actual number of trips made by New Brunswick residents to the City of Saint John. Data is also not available on the characteristics of the resident visitors to the region. However, information is available on the non-resident

market, its origin and size. Exhibit 3-11 details the non-resident visitation by origin in 1980 and 1983. The largest single group are U.S. visitors, accounting for over 40% of non-resident parties in 1980. U.S. visitation increased slightly between 1980 and 1983, an increase from 17,508 to 23,866 parties (a change of 36.6%). Other major markets include Ontario, Quebec, Atlantic Canada and Western Canada.

EXHIBIT 3-10: PERIOD OF EXIT (NON-RESIDENT TRAVELLERS) CITY OF SAINT JOHN, 1980 AND 1983

<u>Period</u>	<u>1980 Parties</u>	<u>%</u>	<u>1983 Parties</u>	<u>%</u>
May	2,070	4.8	3,150	6.0
June	4,571	10.6	8,254	15.7
July	14,144	32.8	15,193	29.0
August	10,392	24.1	15,141	28.9
September	7,891	18.3	4,533	8.6
October	4,053	9.4	6,192	11.8
<u>Total Non-Residents Staying Overnight</u>	<u>43,121</u>	<u>100.0</u>	<u>52,463</u>	<u>100.0</u>

Source: New Brunswick Department of Tourism, Recreation and Heritage, Auto-Exit Survey, 1980, 1983 (May to October)

EXHIBIT 3-11: MARKET TYPES AND SIZE, (NON-RESIDENT TRAVELLERS) SAINT JOHN 1980 and 1983

	<u>1980</u>	<u>%</u>	<u>1983</u>	<u>%</u>
<u>Non-Resident Parties</u>				
Ontario	9,012	20.9	10,833	20.6
Quebec	4,312	10.0	4,197	8.0
Atlantic Canada	10,349	24.0	10,680	20.4
Other Canada	1,941	4.5	1,881	3.6
United States	17,508	40.6	23,886	45.5
Foreign/Unknown	--	--	984	1.9
<u>TOTAL</u>	<u>43,122</u>	<u>100.0</u>	<u>52,461</u>	<u>100.0</u>

Convention Market

Another potential tourist market in Saint John is the convention market. Statistics from the Saint John Visitor and Convention Bureau have shown that the number of delegates attending conventions in Saint John increased by 85% between 1983 and 1986. (see Exhibit 3-12: Conventions in Saint John)

EXHIBIT 3-12: CONVENTIONS IN SAINT JOHN 1981-1986

<u>Year</u>	<u>Number of Events*</u>	<u>Delegates</u>
1981	65	N/A
1982	78	16,405
1983	109	45,705
1984	102	47,028
1985	153	74,707
1986	94	84,700

* includes national, provincial and regional conventions; meetings and reunions, major sports events; and trade shows.

Saint John is being promoted as a convention centre through the City's visitor and convention bureau. The attendance breakdown per event for 1986 is as follows: national conference: 19 - 5818; provincial: 22 - 6824; regional: 22 - 7781; meetings and reunions: 16 - 2125; major sports events: 9 - 14,553; trade shows: 8 - 40,350.

Reason for Visit

What draws people to an area, the reason for visit, is an important market component. Exhibit 3-13 summarizes the non-resident reasons for visits in 1980 and 1983. The majority of non-resident travellers stated that the reason for visiting was sightseeing; approximately 49% and 66% respectively in 1980 and 1983.

EXHIBIT 3-13: REASON FOR VISIT (NON-RESIDENT, OVERNIGHT PARTIES)
CITY OF SAINT JOHN, 1980 AND 1983

<u>Reason for Visit</u>	<u>1980 % of Total</u>	<u>1983 % of Total</u>
Visiting Friends and Relatives	18.2	15.6
Sightseeing	48.8	66.3
Business	10.7	5.4
Outdoor Activity and Recreation	--	0.2
Passing Through to Another Destination	17.4	10.6
Other	4.9	1.9
TOTAL	100.0	100.0

Source: N.B. Department of Tourism, Recreation & Heritage, Auto Exit Survey, 1980 and 1983.

Transportation Modes Used by Visitors

The major transportation mode is the passenger car. In 1983, 83.3% of non-resident parties travelled by passenger car to Saint John, while 13.1% used camper vehicles. However, another important market is motorcoach tours. Exhibit 3-14 summarizes motorcoach tour nights in Saint John between 1979 and 1985. Saint John's share of the total provincial motorcoach tour nights has increased from approximately 23% in 1979 to 34% in 1985. During the past year, 737 motorcoach tour nights were spent in Saint John.

The percentage distribution of tours by month in 1985 was as follows:

	<u>1985</u>
May/June	9.9
July	25.6
August	25.9
September/October	38.6

EXHIBIT 3-14: MOTORCOACH TOUR NIGHTS - CITY OF SAINT JOHN,
1979-1985

	<u>Tour Nights</u>		<u>Saint John as a % of Provincial Total</u>
	<u>Saint John</u>	<u>New Brunswick</u>	
1979	426	1,818	23.3
1980	512	2,205	23.2
1981	624	2,490	25.1
1982	701	2,238	31.3
1983	755	2,231	33.8
1984	689	1,994	34.6
1985	737	2,181	33.8

Note: 1 Tour Night = 1 Bus staying 1 night

Source: N.B. Department of Tourism Recreation & Heritage,
Motorcoach and Group Tours, 1979-1985

3.2.4 Accommodation

This section examines hotel/motel and campground capacity and utilization; and other forms of accommodation. Two principal sources are used to derive utilization rates: the annual provincial Roofed Accommodation Occupancy Rates 1981, 1983, 1985 and the Auto Exit Survey for 1980 and 1983.

Hotel/Motel Utilization

Exhibit 3-15 displays hotel/motel capacity and utilization rates for 1981, 1983 and 1985. For the Province of New Brunswick, the 1985 occupancy rate remained stable with an annual occupancy rate of 57% - this represents no change over 1984. Occupancy rates for the peak season was, on average, 66% for both years.

In 1980, a total of 242,986 roomnights were utilized for an average occupancy rate of 51%. In 1985, a total of 284,193 roomnights were utilized for an average occupancy rate of 56%. The majority of the increase has occurred in the peak and

shoulder seasons. The average occupancy for the peak and shoulder seasons was 57% and 49% respectively in 1981, which increased to 74% and 59% respectively in 1985. One explanation for this trend is the large increase in roomnights available during 1985, particularly in the shoulder and off season.

EXHIBIT 3-15: HOTEL/MOTEL CAPACITY AND UTILIZATION, SAINT JOHN
COUNTY 1981, 1983 AND 1985

Accommodation Indicator	1981	1983	1985
Average No. of Rooms Available			
Peak	1,410	1,193	1,447
Shoulder	1,361	1,189	1,425
Off Season	1,218	1,074	1,341
TOTAL	1,306	1,133	1,390

Roomnights Available

Peak	172,051	145,585	176,549
Shoulder	84,351	73,749	88,350
Off Season	220,042	194,415	242,589
TOTAL	476,444	413,749	507,488

Roomnights Utilized

Peak	98,069	107,733	130,646
Shoulder	41,332	44,987	52,127
Off Season	103,420	99,152	106,740
TOTAL	242,986	248,249	284,193

Occupancy Rate (%)

Peak	57	74	74
Shoulder	49	61	59
Off Season	47	51	44
TOTAL	51	60	56

Notes:

- (1) Peak Season = 122 days (June-September)
- (2) Shoulder Season = 61 days (May and October)
- (3) Off Season = 182 days
- (4) These seasons are based on the historical distribution of roomnights available and utilized by month during the 1980 to 1983 period.
- (5) Roomnights Available = No. Days Units Available
 per Month X per Month
- (6) Roomnights Utilized = Roomnights Occupancy
 Available X Rate

Source: N.B. Department of Tourism, Recreation & Heritage, Roofed Accommodation Occupancy Rates, 1981, 1983, 1985.

Campgrounds

Exhibit 3-16 summarizes campground person attendance for New River Beach and Oak Point in Saint John County.

EXHIBIT 3-16: CAMPGROUND ATTENDANCE, SAINT JOHN COUNTY 1981-1985

<u>Provincial Campgrounds</u>	<u>New River Beach</u>	<u>Oak Point</u>	<u>Total</u>
1981	14,655	2,040	16,695
1982	13,285	2,189	15,474
1983	12,075	1,717	13,792
1984	9,542	2,196	11,738
1985	10,272	2,865	13,137
Occupancy Rate (July-August, 1985)	47.1	30.1	

Source: N.B. Department of Tourism, Recreation and Heritage,
New Brunswick Provincial Parks, 1985, Statistical Report,
 April, 1986

Other Accommodation

In addition to roofed accommodation and campgrounds, many visitors to the region use other forms of accommodation for which data sources are incomplete. Examples would include: friends' and relatives' homes, cottages and lodges. Data is available for non-residents from the Auto Exit Survey.

Exhibit 3-17 provides an estimate of the number of parties and party nights spent in other accommodations by both resident and non-resident visitors. These accommodations have been categorized as two types: Friends and Relatives, and Other.

EXHIBIT 3-17: OTHER ACCOMMODATION USED BY VISITORS STAYING
OVERNIGHT - SAINT JOHN, 1983, 1984

<u>Type of Accommodation</u>	<u>Party Night</u>
Friends and Relatives	
Resident	102,000
Non-Resident (Saint John)	62,431
Other	
Resident	220,000
Non-Resident	7,192

Source: N.B. Department of Tourism, Recreation and Heritage,
Auto Exit Survey, Domestic Travel Survey, Canadian Travel
Survey, and The DPA Group Inc.

3.3 Experience Elsewhere

This section presents information related to existing attractions similar to Partridge Island in the United States and England.

Angel Island and Alcatraz are two islands situated in San Francisco Bay that have been developed as tourist facilities. Substantial numbers of people visit these islands, and each shares similarities with Partridge Island. San Francisco has a population of 750,000 with the total Bay population being approximately 2 million.

Ellis Island is located in New York Harbour close to Liberty Island. The immigration station built on the island became the major processing point for European immigrants entering the United States. The buildings, located on Ellis Island, have been recently renovated.

Liverpool, England was a major point of embarkation for Irish Emigrants.

Angel Island

Angel Island which lies in San Francisco Bay, shares historical themes similar to that of Partridge Island.

Although much larger in size, (740 acres to Partridge Island's 23 acres), Angel Island has experienced a varied military history stretching back to the American Civil War and including World War I and World War II.

Angel Island served as an immigration and quarantine station starting in the early 20th century. Whereas the bulk of the immigrants passing through Partridge Island were of Irish descent the majority of those arriving at Angel Island were Oriental.

Ships arriving from foreign ports were fumigated, and immigrants suspected of carrying contagious diseases were kept in isolation.

The movement to make the island into a public park was started in 1947, and in December 1962 the entire island was turned over to the State of California for park purposes. A 7 acre Coast Guard Station is also in active operation on the island.

Angel Island offers an interesting selection of flora and fauna, trails, beaches, environmental campsites and picnicing facilities.

The California State Park Service indicated that for the 1983/84 fiscal year 200,000 people visited Angel Island. With a new ferry service in place from downtown San Francisco it is estimated that 1/2 million visitors/year could be expected.

Six to eight boats per day operate in peak season (May - September) with weekend crossings only in the off-season. Crossing time is approximately 25 minutes and the cost in U.S. \$2.50 per return trip (\$2.00 to operator \$.50 to park service).

Angel Island is marketed as the "Ellis Island of the West" and is promoted in San Francisco newspapers. A recent media campaign to promote the island brought in the sponsorship of Bell Telephone and Post Cereals and was highlighted by special event days together with teachers' and educational packages.

Although large in size, Angel Island operates with minimal staffing (5 Rangers, 4 maintenance workers and 6 seasonal workers).

Of the approximately 80 military quarantine and immigration buildings on the island, most have reached the point of being condemned. Limited access to these structures is available but the majority, although still intact, are boarded up.

Alcatraz Island

Alcatraz Island, situated in San Francisco Bay, has been compared to Partridge island in several Saint John newspaper articles (e.g. Fred Hazel and Harold Wright).

Alcatraz is run by the National Parks Service and with an area of 22 acres is of comparable size to Partridge Island. Although having gained notoriety as a maximum security federal penitentiary, Alcatraz shares similarities with Partridge Island.

Historically, the first Lighthouse completed on the west coast was built on Alcatraz in 1859. Alcatraz was also the site of various heavy artillery defensive batteries from the mid to late nineteenth century.

The National Park Service stated that an average 3,000 people/day visit Alcatraz during the peak season, June - September. The annual visitor rate is approximately 3/4 million.

Ten boats operate per day during the summer; this is reduced to 8 boats in the winter. Approximately 300 people are transported per boat and in the summer; space is sold out for several weeks

in advance. The charge for ferry service is \$4.00 per return trip with no additional charges on the island.

Regarding promotion, Alcatraz sells itself on the "prison theme" and it is reported that many visitors do realize that the island is a National Park.

Advertising of the island is limited to local newspapers and information brochures. It was also indicated by the Park Service that most visitors are from out of state.

Ellis Island

Ellis Island together with neighboring Liberty Island are administered by the National Park Service.

The former U.S. Immigration Centre on Ellis Island is at the present time being renovated and the main building is being transformed into an immigration museum.

Funding for the restoration, together with the recently completed work on the Statue of Liberty, has come from the private Statue of Liberty-Ellis Island Foundation. The head of this foundation which raises and dispenses renovation funds is Lee Iacocca.

The 27 acre island, which has 33 buildings, became a symbol of U.S. Immigration. Between 1892 and the station's closing in 1954, about 3/4 of all newcomers entering the United States were processed on Ellis Island (approximately 17 million).

It is anticipated that Ellis Island will be open for viewing by the public in 1988.

Merseyside Maritime Museum (Liverpool)

The museum itself has been open for 5 years, although the emigration section only opened in March 1986 and the marine section in July 1986.

From March 1986 to the present - 200,000 people have visited the facility including tourists from 32 nationalities.

The emigration section is the major theme of the museum. Computer graphics exhibits the journeys of ships from Liverpool to Canada, United States, Australia etc. (using pictorial maps).

Computers also aid people in tracing their ancestry. No lists of names are provided but sources for further research are indicated. Irish Emigration information is provided.

The major exhibits of the emigration section are:

- . a reconstruction of the steerage area of an immigrant ship of the 1800's.
- . the reconstruction of a typical Liverpool dock street of the 1800's

Outside the museum is found:

- . a typical piermasters house of the 1920's
- . a pilot boat
- . models of ships e.g. The Titanic
- . a display of Tall Ships.

Inside the museum there is an exhibit of Marine paintings on display.

3.4 Opportunities and Constraints

Visitation statistics have shown that tourism has been growing in Saint John. Between 1981 and 1983, the number of non-resident parties visiting Saint John increased from 182,428 to 234,794, a 28.7% increase. The number of non-resident parties staying overnight increased from 43,122 to 52,463, a 21.7% increase.

Tourist Bureau statistics have revealed that visitors registering at tourist centres in Saint John have also increased; 63,092

visitors registered in 1980, this may be compared to 99,475 in 1986, an increase of 57.7%.

A significant and growing market in Saint John is the convention market. Between 1981 and 1985, the number of conventions held in Saint John increased from 65 to 153, a 135% increase.

Motorcoach tours also are a growing market. Between 1979 and 1985, motorcoach tour nights in Saint John have increased from 426 to 736, a total increase of 73%. As well, Saint John's capture rate of the provincial total for motorcoach tour nights increased from 23.3% to 33.8%.

The average length of stay for non-residents in Saint John in 1983 was slightly lower than that of the province (2.37 nights compared to 2.52 nights respectively). This implies that the City needs to provide a greater package of attractions in order to increase its visitation rates and length of stay of visitors. The City has taken the initiative for tourism development, and with the development of an overall strategy for promoting tourism resources as an integrated package, substantial improvements are sure to be gained in the future.

Saint John's major non-resident market areas in 1983 were the United States, representing 46% of total visitation; and Quebec and Ontario which accounted for 30% of visitation. The next largest non-resident market areas are the provinces of P.E.I., Nova Scotia and Newfoundland which together represent approximately 20% of visitation. These market shares have important implications for targetting promotion and advertising. In particular, it is noteworthy that despite the many improvements made to the City's overall amenity package, the visitation from Atlantic Canada has remained stable in absolute terms. There should be an opportunity to entice greater numbers of visitors from the closest market areas through the creation of heightened awareness of Saint John's attractions.

The total value of gross non-resident tourism expenditures in Saint John is approximately \$11 million. Delegates attending conventions and meetings (at 68,000 delegate-days per year) are estimated to account for \$9 million in expenditures. Bus tours account for \$1.5 million. Accurate expenditure information for New Brunswick residents is not available for Saint John. However, assuming 30% of the total Fundy Region resident expenditure of approximately \$19 million is spent in Saint John, this results in \$5.5 million of expenditures in the City. Thus, a conservative estimate of the total value of tourism to the City is in the order of \$27 million per year. Tourism represents a substantial component of the City's economy. Further investment to maintain and improve the value of this activity is warranted.

Other implications of the market assessment for the development of Partridge Island are as follows:

- . Tourism visitation to Saint John is growing; but to maintain this growth and increase duration of visitor stay a wider variety of attractions should be developed.
- . The rest of Atlantic Canada represents a largely untapped potential market. Particularly with respect to Partridge Island's three major possible development themes, a substantial interested market lies at the doorsteps of Saint John. It would be reasonable to assume that many of the relatives, friends and descendents of those who arrived at or were stationed on the island actually live within a day's commute of Saint John.
- . The majority of visitors (in excess of 80%) arrive by automobile. In addition a substantial number are part of bus tours. This implies that ample parking facilities

should be available at Partridge Island access mode mainland terminal points; other related activities should be automobile oriented; and the bus tour "loading" phenomena should be considered (approximately 40 people must be accommodated as a group at one time). The latter factor has important implications for access mode passenger capacity, guided tours, restaurant seating, etc.

4.0 RESOURCE ASSESSMENT

4.1 Introduction

This chapter presents a consolidation of the major considerations outlined in the technical assessment studies which are contained in Appendices C,D and E. The main objective of the resource assessment is to determine opportunities and constraints related to the location of Partridge Island and its physical characteristics which must be dealt with in the context of interpreting the island's historical, cultural and heritage assets.

4.2 Physical Constraints and Opportunities

Access

The question of appropriate, safe and cost-effective access is foremost in terms of the evolution of a development concept. At present the island is accessible by air, water or on foot over the Negro Point breakwater.

Air access on a routine basis is only possible by helicopter. There are several suitable landing sites on the island but the only site close to the city core is the Coast Guard property - use of which would not be possible for tourists on a daily basis. A site on the periphery of the downtown core could probably be made available but may not afford convenient access by visitors and the closer one moves to the island, the more limited the utility of air transport becomes.

In any event, helicopter access is almost cost-prohibitive. At current average operating costs (including pilot, capital depreciation, fuel and maintenance) based on 4 trips/hour the average round trip fare to Partridge Island would be in the order of \$15 - \$20 per person. This fare is probably beyond what most potential visitors would be willing to pay (See Appendix F). Air access would also be constrained by fog. As well, the number of

passengers which could be transported per trip would be somewhat limited.

Water access would be in keeping with the original debarkation mode and is cost-competitive. A used 40 passenger boat in good condition could be acquired for approximately \$30,000 and operating costs would be in the order of \$20 - \$30 per hour (including captain). The boat could also be made available for harbour tours (which could be incorporated as part of the trip to the island) and charters. The provision of ferry service to Partridge Island could be a private sector opportunity. In Halifax, for example, a local entrepreneur operates and manages two "Cape Island" boats which are used as ferries offering a scheduled service to McNab's Island. The trip distance is approximately the same as Market Slip to Partridge Island and the return fare is \$6.75 (which the operator feels the market will bear, but does not provide a sufficient return on investment). The total number of passengers per day sometimes exceeds 500 during good weather.

Water access would also be possible by hovercraft or hydrofoil (a Canadian invention) at similar cost but possibly greater market appeal due to the "novelty" of the mode. Hovercraft are used in the English Channel and hydrofoil's provide ferry service between Hong Kong and Macao. Cost information is provided in Appendix F; assuming two trips per hour, the return fare would be in the order of \$2.50 - \$5.00. Hovercraft access would obviate the necessity for extensive terminal facilities at the island as these machines simply "ride up" the intertidal zone. As well, the trip to the Island would only take 5 minutes, compared to 20 minutes one way by boat. The hovercraft could be used in any weather or season. The noise level of hovercrafts is somewhat more intense than that of helicopters, and therefore may interfere with tranquility associated with the Island. (In addition to a downtown - island service, hovercraft could also be used for a Fort Dufferin - Island shuttle service.)

Boat access would require the development of suitable terminals at the City and on the island. For the former, Market Slip presents an obvious candidate with many advantages: close to city core, ready access for tourists visiting the Market Square complex, existing high visibility, and existing infrastructure. Construction of a wharf on the island presents some difficulties primarily because of the tidal fluctuation and wave action. The most suitable location would be between the breakwater and the existing wharfage; the latter is recommended because of easy access to the interior of the island, which is not possible at other sites due to the escarpment. A new wharf capable of accommodating a tour boat is estimated to cost in the order of \$500,000.

Use of the causeway has generated a considerable amount of debate during the study. In its present configuration, it can only be traversed on foot - a somewhat risky journey due to the fact that there is no discernible path and one must climb over large boulders.

Many suggestions have been put forward in terms of potential utilization of the breakwater for access: streetcars, monorail, shuttlebus, etc. All of these developments would require substantial rehabilitation and upgrading of the breakwater. It is estimated that in excess of \$2 million of construction expenditures (see Appendix D) would be necessary to permit a vehicle carrying capacity roadway to be built. Even then, the structure would be subject to constant undermining/erosion.

Notwithstanding this cost, the escarpment at the island - end of the breakwater presents problems, as does the Fort Dufferin site in terms of detailed land development, acquisition and access from the West End of the City.

Furthermore, there is a desire, by many, to retain the mystique associated with Partridge Island's relatively isolated location in the harbour. The development of a permanent link to the mainland would reduce this mystique.

In view of the development costs, private sector commercial opportunities and spin-off tourism activities, it is recommended that water borne conveyance be the mode of access to Partridge Island.

Climate

As indicated in the physical assessment, (Appendix C) the island is fog bound for a significant portion of the tourism season. As well, cooler than normal temperatures prevail. These aspects will mitigate access to and appeal of the island. Firstly, navigating a boat through the harbour and docking on the island in fog conditions will require an experienced operator. Secondly, it may prove difficult to entice visitors to embark upon a "cold" journey to an "invisible" destination. The fog, however, may add to the mystique of the Island for some tourists. As well, the cool temperatures may be attractive to some visitors, as it provides relief from hot and humid climates.

The problems associated with fog and climate, however, will require imaginative marketing to overcome. The most appropriate avenues will be to incorporate the weather with the theme of development. Fortunately, the climate characteristics are in many ways compatible with potential themes.

Existing and Potential Future Uses and Facilities

Partridge Island is presently the site of an active Coast Guard station. Present operations include a lighthouse and foghorn. The station is manned by two permanent employees.

Existing facilities associated with the Coast Guard function are:

- . lighthouse
- . light keeper's residence
- . assistant light keeper's residence
- . fog signal building (whistle house)

- . wharfage and marine railway
- . "old radio shack" (storage)
- . military generator building (storage)

For the most part, the Coast Guard facilities are being maintained in excellent condition.

Existing structures associated with past roles are:

- . three gun emplacements
- . two observation towers
- . three ammunition/powder magazines

All of these are in poor condition and can be expected to deteriorate further unless preventive measures are undertaken.

The Coast Guard intends to replace the lighthouse with an automated system in the near future. An actual date has not as yet been finalized. As well, the Port of Saint John's long term development plan includes filling in the harbour up to Partridge Island, effectively making it part of the mainland. The probability of implementation of this development is not known with certainty. However, it would appear to be necessary only in the long term future.

Any potential tourism development of Partridge Island must be tailored to fit in with its role as an operating Coast Guard Station. In its future configuration, this should present only minor problems, as once the light system is automated, most existing Coast Guard structures will become redundant. Maintenance of the automatic light will be conducted on a monthly basis. The major consideration will be security of Coast Guard facilities. This factor reinforces the advisability of restricting access to a scheduled ferry service.

Location

The location of Partridge Island is an important consideration. One must take into account:

- . visibility from downtown and other tourist attractions
- . relative isolation from mainstream of events
- . potential linkages between the Island and downtown.

The island's isolation could be an asset provided promotion is sufficient to develop interest in visitors to Saint John. The island is visible from several important vantage points in the city, notably: City Hall, Market Square, Carleton Martello Tower, etc. These viewing areas should be exploited to generate awareness of the island for visitors who have come to Saint John for other reasons.

Scale of Development

The Island is small, with limited physical and social carrying capacity. Both of these constraints are important. The fragile nature of the vegetation is such that it cannot withstand large numbers of people circulating freely. In addition, the quality of the experience associated with many of the themes will be reduced if the island becomes too crowded - only a limited number of visitors should be allowed on the island at any one time. The precise number will be dependent upon the type of development concept adopted. To some extent this will be regulated if boat access is the sole means of entry to the island.

Fort Dufferin

The potential for development of Fort Dufferin is limited, at least in the near term. The area is at present privately owned and in addition to four or five residences, is the site of a

commercial gravel operation (see Appendix D for more detail). Rehabilitation and development of this area would be extremely costly and unwarranted unless the breakwater were to be improved to provide a direct and permanent link to the island. Nevertheless, this site has both historical significance and connection to Partridge Island. Consideration should be given to using this site for commercial private sector ventures in the long term if market conditions are favorable. For example, the area could be used for a hotel, but not until occupancy rates in the city improve.

4.3 Interpretation Opportunities

An historical commentary regarding Partridge Island is presented at Appendix E. This commentary is not an exhaustive history of the island, but rather an outline of possible interpretive potential.

The themes of critical importance to potential development are:

Military Fort

The island was used in a defensive role at various periods from 1812 to 1945. Three major periods could be interpreted:

- . War of 1812
- . mid-century
- . Second World War.

Immigrant Reception and Quarantine Station

The island served an important role as the doorstep to Canada for millions of immigrants. Potential interpretation could centre on:

- . reconstruction of the fever hospital
- . concentration of immigrant records

- . highlight Celtic Cross as a symbol of the island's role.

Marine Technology

The importance of the island to navigation has been recognized since the Loyalists. This theme must be pursued as its present Coast Guard function will be maintained for the foreseeable future, thus affording an opportunity to establish a link between the past and present. Interpretive elements should concentrate on:

- . signals, warning guns
- . lighthouses
- . foghorns (particularly Foulis' steam fog horn).

Many lighthouses are being automated. Often the old equipment is dismantled and disposed of. However, it is believed that obsolete lighthouse equipment is stored in Cornwall, Ontario: some of this equipment was used in the "Museum of the Great Lakes" in Kingston, Ontario. Partridge Island could be developed as a lighthouse museum (a collection of eastern Canadian seaboard artifacts) similar to that at Rockland, Maine.

5.0 VISITOR POTENTIAL

Visitation forecasts are essentially "chicken and egg" exercises - visitation is to some extent a function of the scope of the development, so reliable forecasts cannot be made until the scope is defined.

On the other hand, in developing the scale of the project, one must have some sense of the potential market which can be addressed.

To obtain "orders of magnitude" visitation estimates as a basis for determining project scope, we have considered the experience of related attractions in Saint John and elsewhere under two scenarios: the first scenario assumes access to Partridge Island by boat only; the second scenario assumes access by some form of "fixed link" using the existing breakwater. This would entail development of a road, tramway, or shuttle bus service from Fort Dufferin.

The "boat access" scenario forms the "low-case" estimate of the potential market since the frequency of visitation to the island is constrained by the capacity of the boat, the number of trips each day, and weather conditions. The "fixed-link" scenario is the "high-case" visitation estimate as a fixed link would allow access to the island in all weather conditions, and all seasons. It would also offer more convenience for the elderly, the handicapped, or those who are uneasy about boat travel.

5.1 Carrying Capacity

The concept of carrying capacity refers to the ability of a resource base to sustain a level of continual human activity without incurring permanent damage.

The overall carrying capacity of the island represents the absolute upper bound of tourism visitation which can be supported

by the island, yet still maintain a reasonable degree of movement and protection of natural resources and artifacts.

There are three types of carrying capacity considered in this concept:

- Social carrying capacity is a measure of the number of contacts (or density) which humans can tolerate in terms of a quality experience;
- Physical carrying capacity is a measure of the total physical land mass available within an area to accommodate human activity;
- Ecological carrying capacity is a measure of the sensitivity of specific environmental factors such as soil compaction, erosion, root exposure, water quality and the like, to human activity.

Social carrying capacity is primarily a subjective measure and is dependent upon the socio-economic characteristics of a particular tourist group and the nature of the experience. In the case of Partridge Island, it could be argued that visitors will prefer an uncrowded environment; this is in keeping with the isolation and mystique of the setting. From the perspective of social carrying capacity the island is a small land base which is a constraint to development. The most likely maximum number of visitors which can be accommodated at one time on the Island is estimated to be in the order of 200 persons.

5.2 Boat Access

Potential visitation to Partridge Island under the boat access scenario was estimated by means of a comparative analysis of data from other major Island based historical attractions.

5.2.1 Alcatraz

Alcatraz, situated in San Francisco Bay is an important historic site because of its notoriety as an inescapable prison and its

physical dominance of the harbour. Annual visitation to Alcatraz is approximately 750,000 visitors per year. Access is by large tour boats accommodating 300 persons; trips to the Island are available approximately every 40 minutes. The total cost of the trip is \$4 per person. The tours operate year round, although at a reduced frequency from mid-September to early June.

San Francisco does not have estimates of the total number of visitors to the City every year, but records are maintained of visitors staying in paid accommodation. In 1985, the total number of visitors in paid accommodation was 2,649,000. Thus, the Alcatraz capture rate, expressed as a percentage of overnight visitors, is 28%.

5.2.2 Angel Island

Angel Island, also in San Francisco Bay, has a history with similarities to Partridge Island. It was a quarantine and immigration station in the late 1800's and early part of the 20th century. It was a defensive military post with gun batteries from the 1860's until 1909. It was an important debarkation point for troops in World War I and prisoner of war camp for Japanese prisoners during World War II. Angel Island has 80 buildings, some dating back to 1900.

Visitation to Angel Island is via a longer and more costly boat ride than for Alcatraz; or shorter trips from Tiburon and Berkeley are offered. It is also accessible by private boats. Total visitation in 1983-1984 was approximately 200,000 visitors. Using the same target population base as Alcatraz, Angel Island's capture rate is equivalent to approximately 8%.

5.2.3 Grosse Ile, Quebec

Gross Ile in the St. Lawrence River was another important immigration and quarantine centre. Gross Ile has some 80 buildings relating to this role in the early 1900's. The estimated visitation to Gross Ile, according to a market study

recently conducted for Parks Canada is 75,000, assuming major renovations of important buildings, extensive interpretation and construction of a second-class hotel. Of this total, visitation by families with ethnic ties to the Island would be of the order of 1,000 per year.

5.2.4 Expected Partridge Island Visitation

For Saint John, based on data from the New Brunswick Travel Survey, the number of overnight visitors in 1985 is estimated by DPA to be 68,900. Applying the same capture rate for Partridge Island as experienced for Alcatraz, San Francisco, yields an estimated 19,300 potential visitors. This would have to be considered as an upper limit of the visitation potential for Partridge Island, under ideal conditions of:

- Maximum development of the Island's attractions;
- Low boat fares (\$5 range);
- Extended season; and
- Extensive promotion.

This estimate compares favorably with that of Gross Ile as well, taking into account the differences in scale and market size. With a modest level of development, coupled with the constraints of a short season and a serious potential constraint of a large number of days with poor visibility due to fog, a more likely estimate of visitation is probably in the range of one-half the upper limit. Thus, assuming boat access, we estimate the maximum potential visitation to Partridge Island to be in the order of 10,000 persons the first year of operation.

Exhibit 5-1 presents potential visitation for the ferry access scenario. The forecasts are based on statistics obtained from the 1983 Auto Exit Survey, DPA estimates for overnight visitation and 1986 Census Data.

As shown, there is a total of 303,694 visitor parties, and 28,115 Saint John households which comprise the overall potential

market. This does not include potential visitors residing in other parts of New Brunswick. For the purpose of forecasting visitation to Partridge Island, the following capture rate assumptions were used:

	Year 1	Year 5	Year 10
Pass-through traffic	.5%	.75%	.5%
overnighters	10.0%	21%	25%
resident Households	10.0%	15%	5.3%

These capture rates were based on visitation trends for other tourist attractions in Atlantic Canada. Generally, capture rates of pass-through traffic are very low. The most significant increase in visitation occurs in the overnight visitation market, particularly in the first five years of operation. The visitation capture rate for resident households is expected to peak in the first five years and then decline significantly after the "novelty" has worn off.

EXHIBIT 5-1: PARTRIDGE ISLAND CONCEPT A - VISITATION POTENTIAL

	Number of Parties	Year 1	Year 5	Year 10
Pass-through traffic	234,794	1,174	1,761	1,174
Overnighters	68,900	6,890	14,469	17,225
Saint John Households	28,115	2,812	4,217	1,490
Total	<u>331,809</u>	<u>10,876</u>	<u>20,447</u>	<u>19,889</u>

A total party visitation of 10,876 was forecasted for the first year of operation of Partridge Island. It is expected that this visitation would peak at 20,447 in Year 5. In year ten, visitation by overnighters is expected to increase to 25% while other visitation categories will decline somewhat.

These figures do not include any visitation generated by special events such as a festivals or concerts, but rather represent the

capture from the expected overall tourism traffic base to the Saint John area.

5.3 Fixed Link

If the Island was connected by a fixed link, the tourist visitation could be expected to be substantially higher than the "boat access", case described above. With such access, the visitation to the Island would probably approximate the visitation to other readily accessible and theme related attractions.

Visitation data for Parks Canada Historic Sites was examined for the purpose of ascertaining visitation trends for historic and theme-related sites in Atlantic Canada. Exhibit 5.2 presents visitation figures for 1981 and 1986. Visitation varied significantly by site, with Signal Hill in Newfoundland attracting the highest number of visitors in 1986, a total of 879,528. The Halifax Citadel and Louisburg also attracted a large number of visitors, 363,974 and 201,697 respectively.

The visitation statistics indicate that there has been a decrease in visitation for most sites over the five year period. However, these figures must be interpreted cautiously, as most visitation statistics were based on daily estimates, not actual registration data. Visitation data for Carleton Martello Tower, however, were based on actual counts. This data has shown that visitation at the Martello Tower increased by about 23 percent between 1981 and 1986. Total visitation for this site was 26,531 persons in 1986. Exhibit 5.3 presents detailed visitation data from 1981 to 1986 for the Carleton Martello Tower.

This data indicates that visitation trends at the Carleton Martello Tower have varied somewhat over the past six years, ranging from a low of 20,825 in 1984 to a high of 26,711 in 1985. The bulk of visitation has occurred in July and August of each year, accounting for 56 - 63 percent of visitors.

 EXHIBIT 5-2: VISITATION AT PARKS CANADA HISTORIC SITES

<u>Site</u>	<u>Visitation</u>		<u>% Change</u>
	<u>1986</u>	<u>1981</u>	
A.G.Bell Museum, Baddeck, N.S.	215,812	237,268	- 9.0
Cape Spear, St. John's, Nfld.	148,872	166,532	-10.6
Carleton Martello Tower, Saint John, N.B.	26,531	21,646	22.6
Fort Amherst, Rocky Pt. PEI	48,310	38,536	25.4
Fort Anne, Annapolis Royal, N.S.	96,181	101,231	- 5.0
Fort Beausejour, Aulac, N.B.	48,207	55,019	-12.4
Louisburg, N.S.	201,697	215,921	- 6.6
Halifax Citadel, N.S.	363,974	531,691	-31.5
Port Royal, N.S.	61,813	80,550	-30.3
Prince of Wales Martello Tower	11,204	15,178	-35.5
Signal Hill, St. John's Newfoundland	879,528	857,996	2.5
York Redoubt	27,849	47,372	-41.2

 Source: Parks Canada May, 1987

 EXHIBIT 5-3: CARLETON MARTELLO TOWER VISITATION DATA

	Total Visitation	Percentage Breakdown		
		May-June	July-August	Sept.-Oct.

1981	21,646	N/A	N/A	N/A
1982	26,962	14.5	63.2	22.2
1983	25,529	15.3	60.0	24.7
1984	20,825	20.0	58.9	21.1
1985	26,711	18.3	56.5	25.2
1986	26,531	N/A	N/A	N/A

Source: Parks Canada, 1987

The average annual visitation to Martello Tower has approximated 24,700. With a larger scale of development than the Martello Tower, Partridge Island should be able to attract 30,000-40,000 visitors per year.

Forecasts for the fixed link scenario are provided in Exhibit 5-4. For the purpose of forecasting visitation to Partridge Island, the following capture rate assumptions were used:

	Year 1	Year 5	Year 10
pass-through traffic	1%	1.5%	1.1%
Overnighters	30%	38%	37%
Resident Households	25%	30%	25%

These capture rates are more optimistic than rates used in Concept A due to the ease of access which would be created by the fixed link. It is still expected that the capture rate of pass-through traffic will be minimal. The capture rate of overnight visitors is expected to peak at 38% and decline slightly or remain constant afterwards. Visitation capture of resident households is expected to be in the order of 25% during the first year, peak at 30% in year five and decline slightly to 25% in

year 10. A significant decline in visitation by resident households is not expected due to the relative ease of access to the Island.

In year one of the fixed link scenario, visitation is expected to reach 30,000. It is forecasted to increase to 38,139 in year five and decrease slightly to 35,000 in year ten.

EXHIBIT 5-4: PARTRIDGE ISLAND CONCEPT B - VISITOR POTENTIAL

	Number of Parties	Year 1	Year 5	Year 10
Pass-through traffic	234,794	2,348	3,522	2,583
Overnighters	68,900	20,670	26,182	25,493
Saint John Households	28,115	7,029	8,435	7,029
TOTAL	<u>331,809</u>	<u>30,047</u>	<u>38,139</u>	<u>35,105</u>

5.4 Incremental Visitation

It is important to note that all of the above estimates are based on a Partridge Island share of total tourist visitation to the Saint John area. It does not take into account that the Partridge Island concept itself will be a destination area for certain classes of new tourist activity.

Partridge Island represents an opportunity for the city, province and voluntary sector to target specific market segments for whom the symbolism of the Island will be particularly appealing:

- individuals interested in genealogy and family history, and
- individuals with "roots" extending back to Saint John, notably the New England Irish Americans, but also including other ethnic

groups whose progenitors had some attachment to the Island.

For these markets, support of other related attractions and activities will need to be offered in Saint John, to create a solid image of a city with multi-cultural roots and related activities, for example:

- the standardization and centralization of genealogical research materials
- interpretive displays and facilities concerning immigration
- courses and organized activities geared specifically towards genealogical research and family history
- festivals and events for the cultural groups with ties to Partridge Island (providing the opportunity to "live" their heritage for several days).

These markets will require time to develop but there are many incremental activities (for example organizing genealogical/heritage/sightseeing bus tours in the New England market; a genealogical course in the elder-hostel programs) which will develop an awareness of the significance of Saint John to the family history of many New Englanders. The main product being marketed is Saint John as a symbol of heritage and ancestry for a large market.

The potential market is very large and has a number of favourable conditions, such as:

- an increasing elderly population with more leisure time
- the exponentially increasing interest in family history, and
- the large, fairly accessible, population

within one day's drive and with family ties to Saint John.

The exploitation of this market must be seen to be a long-term goal and must be approached in a well-targeted and systematic manner.

To the extent that these markets can be exploited, there will be additional visitation to Partridge Island over and above the estimates based on capture developed previously. This type of activity will be the factor which moves anticipated visitation from the lower end of the range toward the upper end.

Irish Market

A major market for Partridge Island consists of those individuals of Irish descent. This group consists of approximately 45 million people in North America. Irish culture is promoted in this province through the Irish Canadian Cultural Association which was founded in 1982. The association currently has a membership of over 1,300. Approximately 85% of members reside in New Brunswick; there are also members residing in every province in Canada and many places in the United States.

The Irish Canadian Cultural Association of New Brunswick annually hosts a three-day Irish festival in the Miramichi. The attendance at this festival was 10,000 people in 1984, 12,500 people in 1985; and approximately 19,000 in 1986, an increase of 52% from 1985. It is expected that there will also be a substantial increase in attendance at this festival during 1987 due to publicity and word of mouth referrals. All accommodation facilities in the Miramichi area were fully booked by the end of May for the Irish Festival weekend scheduled for mid-July of this year.

Although there are no formal linkages between the various Irish associations across North America, informal linkages and networking has occurred. The Irish Canadian Cultural Association

of New Brunswick has been contacted by various other organizations, including the American Association of Irish Studies and the Royal Academy of Dublin, Ireland, to obtain copies of mailing lists and newsletters. This informal networking, as well as promotion through newspaper articles and interviews, including those in the Boston Herald and L.A. Times, has had a significant impact on enquiries regarding the association and genealogy. It is expected that this publicity will have an impact on attendance at the Irish Festival.

Promotion

The Irish Canadian Cultural Association of New Brunswick, and other Irish Associations throughout North America are ideal vehicles for promotion and fund raising for Irish developments on Partridge Island. To properly tap this market, it would be necessary to compile a comprehensive listing of all Irish Associations in North America.

This would require some research, however, through networking, this task could be more easily completed. For example, attendance information is kept on all groups and individuals that attend the Irish Festival in the Miramichi. Groups throughout North America could be contacted and requested to provide names and addresses for other Irish Associations, as well as a mailing list for their specific group members.

Partridge Island could be promoted to these associations by providing them with visitation packages, including history of Partridge Island; particularly the Irish component, and Saint John tourist brochures.

Promotion of Partridge Island to the persons of Irish descent could also be tied in with the Irish festival in the Miramichi. Part of the festival, perhaps the closing ceremony and events, could take place on Partridge Island. Assuming that 10% of persons attending the festival at the Miramichi would also attend events or a memorial service on Partridge Island, this would

result in approximately 2,000 persons visiting the Island during one day. This level of visitation, however, would exceed the carrying capacity of the Island, and therefore visitation should be staggered throughout the day.

Genealogy Market

Data is not available on the actual size of the genealogy market. However, attendance trends at the Provincial Archives in New Brunswick and Nova Scotia indicate that there is a growing interest in Genealogy. A study of attendance trends at the Provincial Archives of New Brunswick during July 1984 and July 1985, revealed that approximately half of all users cited genealogy as their major reason for visiting the Archives. A further analysis of the attendance data revealed that approximately 77% of American visitors to the Archives stated genealogy as the purpose of their visit. This may be compared to 38% of users from Fredericton, 62% of those from the rest of Atlantic Canada and 47% of those from other parts of Canada. These findings were based on a random sample of 465 patrons from a register of over 10,000 visitors. Approximately 8.4 percent of patrons were from the United States.

The study also revealed that attendance of persons using the archives for genealogy research was found to be somewhat higher in summer than other seasons; 32% of genealogical research occurred during the summer. This may be compared to only 7.2% for other types of research. In 1983, 30,145 people visited the Public Archives of Nova Scotia; 12,000 of these people gave genealogy as the main reason for their visit.

6.0 THEME

6.1 Introduction

Partridge Island will be both a destination attraction and a supporting attraction. To the extent that it will draw new tourist visitation from people interested in its symbolic importance and wanting to physically share in the family history it represents, Partridge Island will be a destination attraction. With appropriate marketing, this aspect of the project can certainly be developed.

Most of the visitation, however, will come from the broader Saint John tourism market (and to some extent the provincial tourist market). In this case, Partridge Island will serve as an additional supporting attraction to both the Province's and Saint John's tourist marketing effort.

6.2 Current Marketing Efforts

6.2.1 Province of New Brunswick

The province's overall promotional and marketing strategy is one which focusses on a theme of "come to the sea". The marketing thrust surrounding this theme is the encouragement of increased ocean-related and recreational activity.

In this regard, there are several opportunities for complementarity between Partridge Island marketing and the overall provincial thrust. To begin with, the atmosphere and physical characteristics of the island are dominated by the marine influence. The island has been a long standing location for navigation aids, and the relationship between debarkation/immigration and sea travel is self-evident.

6.2.2 City of Saint John

The City has no overall tourism promotion strategy or theme. However, based upon the main marketing activities, it is clear that the general orientation in the City's efforts is towards marketing Saint John as a dynamic city with a wide range of metropolitan amenities (shopping, entertainment and quality accommodation). The Market Square Development, and the activity in downtown development are clearly important components in that strategy. There is some supporting promotion in Saint John in relation to its connection with the sea (Festival by the Sea), and in that sense, it does benefit (but probably not significantly) from the Province's overall marketing effort.

One of the images presented by Saint John is that of the "Loyalist City". This image ties in well with the historical and genealogical focus of the Partridge Island strategy. However, it also detracts from the strength of the same idea as it is not an image that would be appealing to most of the cultures for whom Partridge Island has significance. At the same time, it detracts from the image of Saint John as a modern, cosmopolitan centre.

6.2.3 Partridge Island

Three themes have dominated Partridge Island's history: immigration, defence and navigation. In a sense, Partridge Island is a microcosm of the same themes which have dominated Saint John's own history. While immigration has by far been the most dominant activity of Partridge Island (measured in terms of the Island's impact on individuals' lives), the immigration role is currently the least evident in terms of physical presence or buildings on the Island. For both market as well as practical reasons, it is recommended that the development strategy focus on maintaining all three themes on the Island while stressing the dominant role of immigration. This is further elaborated in the following sub-sections.

Market Rationale

In terms of total visitation, the market for Partridge Island is not large and as shown in the previous chapter is well below the carrying capacity of the Island (estimated to be in the order of 60,000-80,000 persons per annum). Therefore, in order to maintain a critical mass of visitation, the attraction should appeal to as many different market segments as possible. However, this must be done without diffusing any message to such extent that the concept will appeal to no one at all. Particularly in the initial stages, other supporting operations (tour boats, food concessions and other on-island activities) will require a varied clientele in order to reach viability.

The defence and navigation aspects of the island can be tied to other interpretive material around themes which appeal to different market segments.

Practical Considerations

It is somewhat ironic that the dominant physical attractions on the Island are the gun emplacements, the lighthouse and lightkeeper accommodations, while the dominant role has been that of immigration. However, given that these facilities exist, it would not make sense to remove or destroy them - rather the challenge would be to develop these into useful interpretive features of the Island and weave them into the immigration theme.

In light of the above factors, the development of Partridge Island should maintain a focus on all three themes, each re-emphasizing in its own way the Province's "come to the sea" strategy. These themes should be as follows:

Primary Theme (Immigration)

"The end of a voyage, the start of a new life".

Secondary Themes

(Defence)

"Defending our harbour, protecting our heritage".

(Navigation)

"The beacon in the sea".

While the themes are in one sense unrelated, they do have the important link to the sea. Also, the three can be woven together through the interpretive program as relating to the immigration theme - with the defensive installations being symbolic of Canada's efforts to protect the progeny of the original immigrants to the Island and the navigational installation as being symbolic of a "rebirth" of the Island. Out of hardship, death and difficult times Partridge Island's role today is a very positive and important one as a "beacon of hope" saving lives and making lives that much easier for today's arrivals.

Scope of the Development

From the foregoing discussion, it is clear that the main attraction of Partridge Island is its symbolism as a physical manifestation of numerous emotions and traditions.

The scope of development on Partridge Island must be adequate to give appropriate physical support to the themes, particularly the primary theme of immigration. At the same time, it will be equally important that mainland-based developments also take place to provide interpretation and services for the occasions when access to the Island will be impossible (such as the off-season, or when inclement weather makes access impossible in the summer). The key will be to maintain a consistent image of Partridge Island and an ability for anyone coming to Saint John at any time to at least have the feel of Partridge Island and its significance in some tangible way, even if unable to physically visit the island.

The immigration theme is the least well represented and will require priority attention in supporting the theme.

7.0 DEVELOPMENT OPTIONS

Based upon the themes discussed in Chapter 6, there is a wide range of potential projects which could be undertaken by various groups. Two concept options are presented for development of the Island. These options vary most significantly in development scale and means of access to the Island. Potential projects for both concept options are provided in Appendix G.

An elaboration of each concept option is provided below:

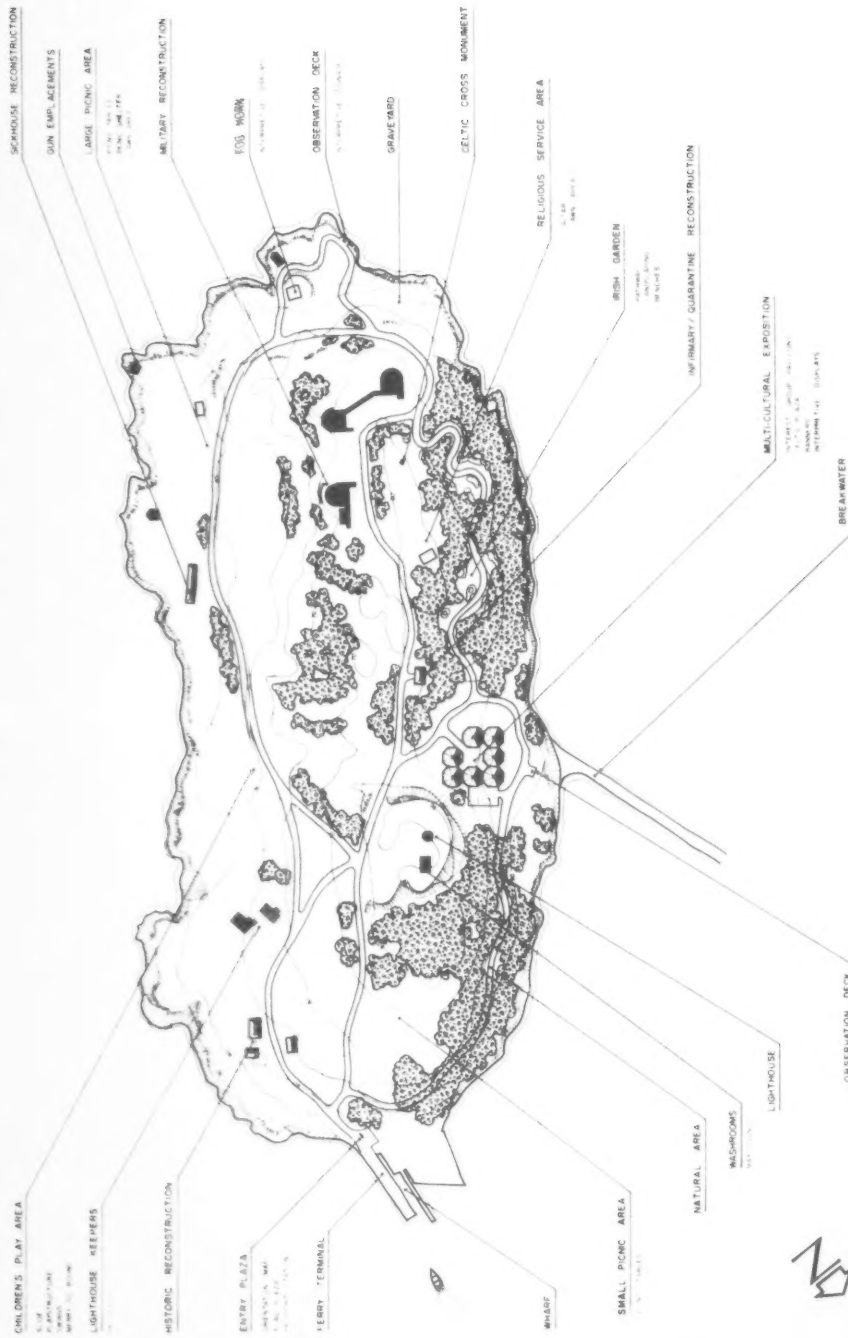
7.1 Concept A

Concept A is based on an estimated potential annual visitation market of approximately 10,000 - 20,000 people under a boat access scenario. Concept A would consist of a number of low-key developments and site improvements. The concept plan for this option is presented on the following page. The major access point would be a wharf and ferry terminal which would be situated on the north-eastern end of the island. General orientation to the Island would be provided through an "Entry Plaza" which would include orientation maps, a flag plaza and a passport station.

The proposed developments for this option relate to the various themes and are discussed below:

Immigration and Quarantine

The majority of developments proposed for Option A are related to the Immigration and Quarantine theme. These include an Irish Garden, Religious Service Area, Celtic Cross Monument, Infirmary/Quarantine Reconstruction, Sickhouse Reconstruction and Graveyard.



PARTRIDGE ISLAND DEVELOPMENT CONCEPT 'A'

Daniel K. Glenn Ltd.

The DPA Group Inc.

SCALE 1:100

Military Fortification

The major developments related to the military theme for Concept A are the rehabilitation of gun emplacements, observation posts, communication tunnels and ammunition stores.

Navigation

The key aspects of the navigation theme for Concept A would include a fog horn, lookout, lighthouse and lighthouse keepers residence.

Other Developments and Site Improvements

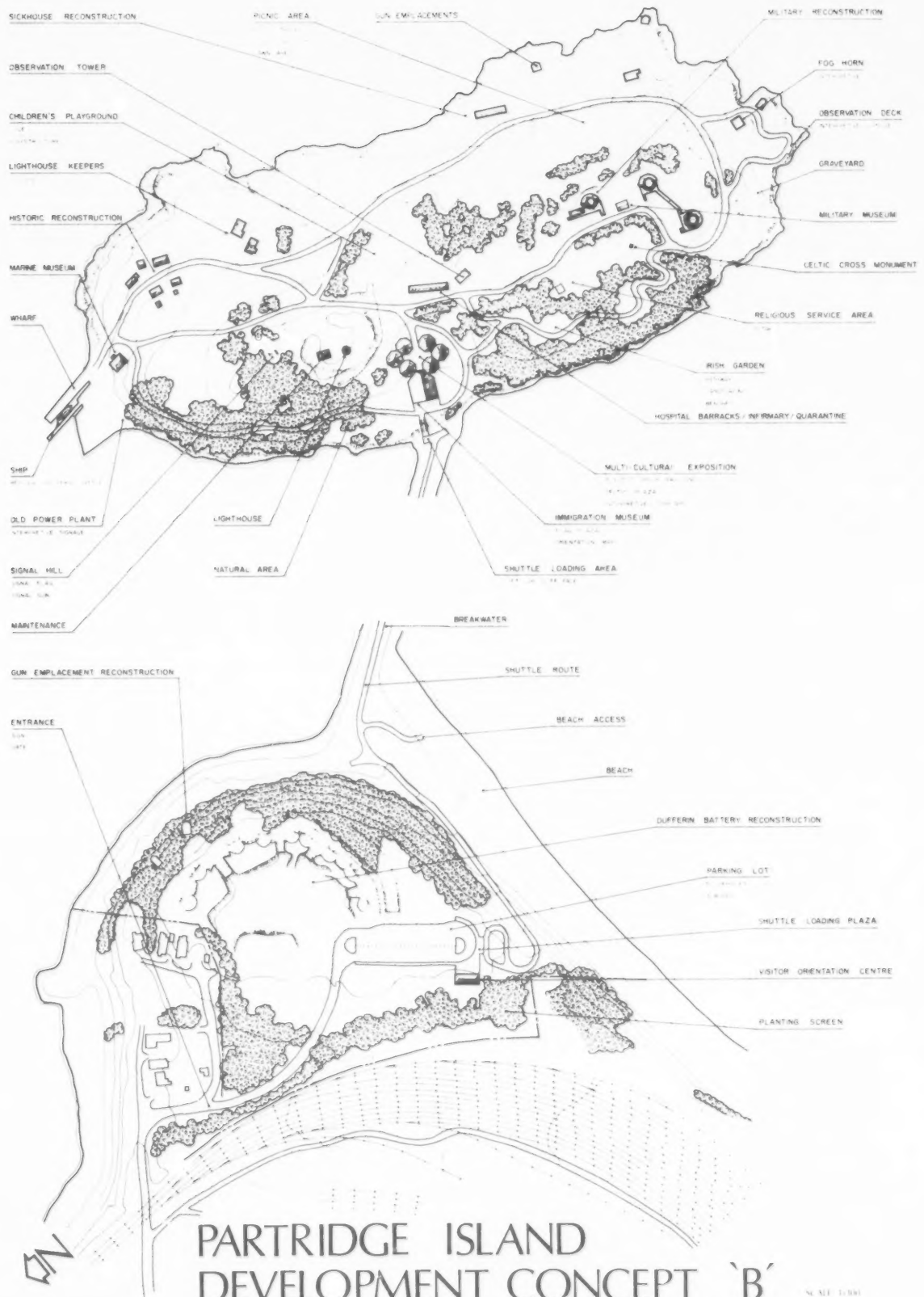
Other site improvements include development of a small picnic area on the north end of the Island, development of a large picnic area on the south end of the Island, and various landscaping improvements.

Sponsorship and Funding

Sponsorship and funding for Concept A projects would come from a variety of sources including various levels of government, private sector and specific interest group associations.

7.2 Concept B

Concept B is based on an estimated potential annual visitation market of 30,000 - 40,000 persons with a fixed link scenario. Development under Concept B would be much more extensive and would include linkage developments on the mainland. These potential developments are discussed in the context of the various themes, as well as location, i.e., Mainland or Island. Concept B is graphically presented on the following page.



Mainland Developments

Under Concept B, several site improvements and orientation type developments would take place at the Fort Dufferin site. Many of the site changes would include access related developments such as a shuttle bus route, shuttle bus loading plaza, and parking lot for 50 vehicles and 3 buses. Major developments would include a visitor orientation centre, Dufferin Battery Reconstruction, and Gun Emplacement construction. Other site improvements would include a planting screen, beach access, and landscaping.

A potential project which could be developed downtown and linked up with Island through the shuttle service is a genealogy centre.

Island Developments

The proposed Island developments for the Concept B option relate to the various themes as discussed below:

Immigration and Quarantine

As in Concept A, the majority of developments proposed for this option are related to Immigration and Quarantine. All developments related to the Immigration and Quarantine theme in Concept A and are included in Concept B. Additional developments for Concept B include an immigration museum and reconstruction of hospital barracks.

Military Reconstruction

The developments related to the military theme for Concept B include rehabilitation of gun emplacements, observation posts, communication tunnels and ammunition stores, development of a military museum, and Signal Hill Development.

Navigation

Navigation theme related developments for Concept B include fog horn, observation deck, marine museum and replica of 19th century ship.

7.3 Cost Comparisons

The estimated development costs for Concept A and Concept B are shown in Exhibit 7-1. It should be noted, however, that these estimates are preliminary and not all inclusive.

The estimated capital costs for Concept A access (tour boat) would be approximately \$275,000 with annual operating costs estimated at \$49,280. Concept B access, which includes a \$3 Million breakwater rehabilitation project, would total over \$3 Million including the shuttle service. The annual operating costs associated with Concept B access would run \$15,000 for the shuttle service and would include the additional operating expenses for the breakwater rehabilitation which are unknown and would depend on the type of reconstruction undertaken.

The estimated capital costs for Concept A construction would be approximately \$1.6 Million with annual operating expenses of \$86,200. The estimated capital costs for Concept B construction would be approximately \$3.7 Million with annual operating expenses of \$303,700. The higher construction costs associated with Concept B reflect the more extensive construction and renovations involved in Concept B, specifically: wharf reconstruction (which includes reconstruction of a 19th Century ship); historic reconstruction (which includes the reconstruction of three to four additional homes); quarantine infirmary (which includes the reconstruction of hospital barracks); genealogy centre; general infrastructure improvements; the addition of an immigration museum; and military reconstruction (which includes construction of a military museum).

EXHIBIT 7-1: ESTIMATED DEVELOPMENT COSTS

ACCESS:	CONCEPT A		CONCEPT B	
	CAPITAL	OPERATING	CAPITAL	OPERATING
Shuttle Service			30,000	15,000
Tour Boat	275,000	49,280		
Breakwater Rehab.			3,000,000	unknown
TOTAL ACCESS	275,000	49,280	3,030,000	15,000
CONSTRUCTION:	CONCEPT A		CONCEPT B	
	CAPITAL	OPERATING	CAPITAL	OPERATING
Observation Tower			50,000	0
Warf Recons.	500,000	5,000	600,000	6,000
Historic Recons.	200,000	10,000	400,000	20,000
Look Out(s)	10,000	1,000	10,000	1,000
Irish Mem. Garden	50,000	2,500	50,000	2,500
Religious Ser. Area	10,000	1,000	10,000	1,000
Celtic Cross Mon.	5,000	0	5,000	0
Interpretation Site	3,000	0		
Lighthouse	25,000	1,000	10,000	1,000
Natural Area	5,000	1,000	5,000	1,000
Picnic Area	10,000	2,000	10,000	2,000
Large Picnic Area	10,000	2,000	15,000	2,000
Quarantine Infirmary	100,000	10,000	300,000	30,000
Genealogy Centre	10,000	2,000	200,000	50,000
Infrastructure	100,000	0	600,000	0
Graveyard	25,000	500	25,000	500
Children's Play Area	25,000	1,000	35,000	1,000
Fog Horn	10,000	1,000	10,000	1,000
Beach Access	2,500	200	2,500	200
Entry Plaza	50,000	2,000		
Immigration Museum			600,000	75,000
Multicultural Expo.	100,000	10,000	100,000	10,000
Sick House Recons.	250,000	32,000	250,000	32,000
Military Recons.	100,000	2,000	200,000	2,000
Signal Hill			5,000	500
Old Power Plant			2,500	0
Marine Museum			200,000	65,000
TOTAL CONSTRUCTION	1,600,500	86,200	3,695,000	303,700
TOTAL ACCESS & CONS.	1,875,500	135,480	6,725,000	318,700

8.0 CONCLUSIONS AND RECOMMENDATIONS

The following summary conclusions have been drawn on the basis of the preceding information and analysis.

Theme

1. The major themes for development are Immigration and Quarantine, Military Fortifications, and Navigation. There are several possible sub-themes within each of these major themes.
2. The dominant theme should be based upon the Irish immigration and quarantine period due to the longer duration of use, importance of the Irish contribution to the development of the City of Saint John, the 45 million descendent target market, and the high level of organization of existing Irish societies which would facilitate promotion and potential fund raising.

Market Viability

There is a sufficient market and public desire for the tourism development of Partridge Island. Saint John Trade and Convention Centre statistics indicate that tourism has increased in the City during the last five years. It is likely that this trend will continue due to aggressive marketing by the City, as well as increased growth in specific market segments such as the convention market. The addition of a "developed" Partridge Island would make a substantial contribution towards increasing visitation.

The existing market is sufficiently large enough to support some development on Partridge Island during its first years of operation, prior to visitation from other markets. Approximately 68,900 tourist parties spend at least one night in Saint John. There are

approximately 234,794 pass-through tourist parties and 28,115 households residing in Saint John. Even a modest capture, by Partridge Island of these markets, would represent a significant number of visitors to the Island.

New Brunswick and the remainder of the Atlantic Region represent a close and relatively untapped market. Many of these potential tourist parties reside within easy commuting distance. The United States, particularly the New England States, represent a major market since a high percentage of persons of Irish descent in these areas can trace their ancestry back to Partridge Island. Other parts of the United States and Central Canada should also be considered largely untapped and could be exploited to a greater degree through more effective marketing.

Persons of Irish descent represent a special market which promotion of Partridge Island should be directed towards. This overall market consist of 45 million persons in North America.

The high level of networking and organizing of existing Irish societies would facilitate promotion and potential fund raising. Effective informal linkages and networking has already been demonstrated by the Irish Canadian Cultural Association of New Brunswick. The Association has been contacted by various other organizations, including the American Association of Irish Studies and the Royal Academy of Dublin, Ireland. Newspaper articles concerning the significance of Partridge Island to the Irish have been published in the Boston Herald and L.A. Times. The foregoing suggests that the Canadian Cultural Association of New Brunswick could be a significant vehicle for the promotion of Partridge Island to the Irish descendants in North America.

The genealogical market potential is significant, particularly to the persons of Irish ancestry in North America. Promotion of Partridge Island to this group could be facilitated through existing societies, associations and by word of mouth.

Development Concepts

3. Two concept options were presented for the development of Partridge Island. Concept A is based on an estimated potential market of approximately 10,000-20,000 visitors annually under a boat access scenario. This plan would consist of a number of low key developments and site improvements. Major developments for Concept A would include an Irish Garden, Religious Service area, Celtic Cross Monument, Infirmary/Quarantine reconstruction, sickhouse reconstruction, graveyard, rehabilitation of gun placements, observation ports, communication tunnels, foghorn, lighthouse, etc. It is estimated that overall capital cost for Island developments under Concept A would be in the order of \$1.6 Million. The estimated capital cost for access would be approximately \$275,000.

Concept B is based on an estimated potential market of 30,000-40,000 visitors annually with a fixed link scenario. Development under Concept B would be much more extensive and would include linking developments on the mainland, such as a genealogy centre. Concept B would include most developments already cited in Concept A. Other major developments not already mentioned include an immigration museum, reconstruction of hospital barracks, military museum, Signal Hill development, marine museum and replica of a 19th Century ship. The estimated overall capital cost for developments included in Concept B would be in the order of \$3.7 Million. Access for this concept,

including breakwater rehabilitation and shuttle service would be over \$3 million.

Potential facilities for each of these themes would have to be further analyzed to assess financial feasibility.

Access

4. Access to the island has been considered from the point of view of security, market appeal, cost, climate/oceanographic operating conditions, and availability of appropriate terminals. Access should be by water, either by boat or hovercraft which appear to be equally cost competitive. Transportation terminals should be located at Market Slip and the existing Partridge Island wharf.

A causeway should not be developed, at least in the short term, due to excessive cost (\$2.5 million) and potential security risk for on-island developments and Coast Guard functions.

Coast Guard Role

5. The light system on Partridge Island is expected to be automated in the near future, thus making most existing Coast Guard facilities redundant. In its future automated configuration, the Coast Guard Role should not conflict with potential tourism development, provided security of these facilities is assured. The unnecessary buildings could be made available for tourism oriented functions.

Physical Characteristics

6. Several adverse physical and natural characteristics associated with the island may constrain its market appeal. The fog, cool temperatures and wind will present challenges in terms of overall marketing approach but should be presented as part of the atmosphere compatible with the major theme.

The relatively small area of the island will restrict the scale of development; it will also restrict the number of people permitted to circulate on the island at any one time. Most interest groups are in favour of low scale development.

Implementation

It is recommended that Concept A be considered for implementation. It is important that a financial analysis and economic impact analysis be conducted. As well, a comprehensive marketing and management strategy is crucial to the success of any tourism development of Partridge Island.

A mainland orientation centre could be developed prior to securing monies for funding. This orientation centre could be situated at the Fort Dufferin site or in the downtown; a permanent exhibit on Island history could also be provided by the New Brunswick museum.

The orientation centre could provide an "intellectual orientation" to Partridge Island, including historical background and themes. After construction is completed, the centre would be especially useful during inclement weather and for providing Partridge Island information to tourists who prefer not to make the trip to the Island.

APPENDIX A
LIST OF INTERVIEWEES
for PARTRIDGE ISLAND STUDY

FEDERAL GOVERNMENT CONTACTS

Public Works Canada
Ed Coy, District Manager Marine Scotia-Fundy District

Transport Canada, Coast Guard
Larry Wilson, District Manager
Bob Boudreau, District Supervisor of Operations & Transportation

Department of Regional Industrial Expansion
Don Cafferty, Implementation Officer
Guy-André Gelinas, Manager Trade and Tourism

Department of Fisheries & Oceans
Brian Thompson, Chief of Planning & Engineering

PROVINCE OF NEW BRUNSWICK

Tourism, Recreation & Heritage
Lorne McGuigan, Sr. Project Manager
Lee French, Tourism Manager

Municipal Affairs
Tom Jellinek, Director of Community Planning

Heritage New Brunswick
Dr. Alan McNairn, Director New Brunswick Museum

CITY OF SAINT JOHN

Economic Development Council
Mac Somerville

Historical Sites & Events Committee
Mike Brown
Garnet Phinney
(Director Engineering & Maintenance,
Acting General Manager, Port of Saint John)

Preservation Review Board
Bob Boyce
Caroline Smith
Mark Hayward

Planning Department
Craig Campbell, Chief of Planning

Tourism
Yvonne Huntington-LeBlanc
Director of Visitors and Conventions

Engineering Department
Charles Robichaud, Assistant
City Manager, Municipal Operations

Port Development Commission
Ralph Murray, Executive Director
Hugh McLellan, Chairman

Saint John Fundy Region Development Commission
Don O'Leary, General Manager

Recreation & Parks
C. Nicolle, Director
David Goss, Recreation Planner

Saint John Public Library
Barbara Malcolm

Board of Trade
Linda Forestell, General Manager

Saint John Heritage Trust
Linda Kerwin, President
Tony Smith, Vice President

INTEREST GROUPS

N.B. Irish Canadian Cultural Association
Dr. Daniel Britt, Saint John Chapter
Farrel McCarthy, President

Jewish Community
Dan Elman, President of Jewish Congregation

St. Andrews Society
Dr. John McKay, President

St. George's Society
Jack Lampert, President

Fundy Divers
Michael Beattie, Maritech Sea Systems

Huntsman Marine Laboratory
Dr. Robin South, Executive Director

IMA Com Travel/Amex
Jerry Hallarhan

Multicultural Association
Robert Purcell, Director

United Empire Loyalists
Eric Teed

Festival Acadien, Saint John
Ron Bourque

Genealogical Society,
Saint John Branch
Peter Gillies, President

N.B. Historical Society
Willard Merritt, Secretary

Saint John Medical Society
Dr. Mohan Iype, President

PRUDE
Carl White

Loyalist Days Inc.
Daphne Nicole

Saint Patrick Society
Dr. Norman Garey

OTHER CONTACTS

Roman Catholic Diocese of Saint John
Peter Murphy, Archival Assistant
Reverend Father Brian Sheehan

CBDC
Mark Hayward - Hayward & Warwick

Hospitality Saint John
Michael Brake - Delta Hotel

Director Operations and Harbour Master
Captain C.E. Pringle

New Brunswick Telephone
Bill Smith, Vice President of Finance

Royal Canadian Artillery Association
(The Loyal Company)
Major F.E. Devenne
Joe Collins
Colonel James H. Turnbull
Major Frank Irvine
Brigadier Philip W. Oland, Chairman & Chief Executive Officer
Moosehead Breweries Ltd.

APPENDIX B
INTERVIEW GUIDE

I. Overall Interest in Partridge Island

Obtain information on the organization's interest, linkage, role, responsibility, etc. regarding Partridge Island. Also ask about personal knowledge of the Island (i.e. - has interviewee ever been there?, etc.)

II. Plans and Infrastructure Needs

Obtain information on short term and long range plans for Island activities and physical development, as well as infrastructure necessary for implementation.

III. Development Potential

Solicit opinions on the development and tourism potential of Partridge Island. Should it be developed? What is worth preserving? Artifacts? Type and extent of development? What facilities or services should be available on the Island (examples, café, concession stands, extensive docking facilities, picnic tables & benches, washroom facilities, camping facilities, interpretative signage, guided tours, etc.)? Feasibility of water or Island activities (festivals, sailing, regattas, etc.)?

IV. Market Potential

Probe

Market Potential for various groups.

V. Concerns for the Future of Partridge Island

Development, aesthetic, environmental, social concerns, etc.

VI. Other Information

Obtain background materials, studies, tourism estimates and information, statistics, etc.

APPENDIX C

NATURAL AND PHYSICAL CHARACTERISTICS OF
PARTRIDGE ISLAND AND ENVIRONMENT

MARTEC LIMITED
Halifax Insurance Building, Suite 805
5670 Spring Garden Road
Halifax, Nova Scotia
B3J 1H6

July 1986

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4. MARINE TRANSPORTATION FACILITIES
 - 4.1 Existing structures
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2.0 GEOMORPHOLOGY

Partridge Island is a small island located at the southeast entrance to Saint John harbour. It is roughly oval-shaped with its principal axis orientated 20° true (NNE-SSW). The island area is approximately 0.1 km^2 and has a maximum elevation of about 25 m above mean sea level. At low tide the rocky reef surrounding the island increases the exposed area by almost three times.

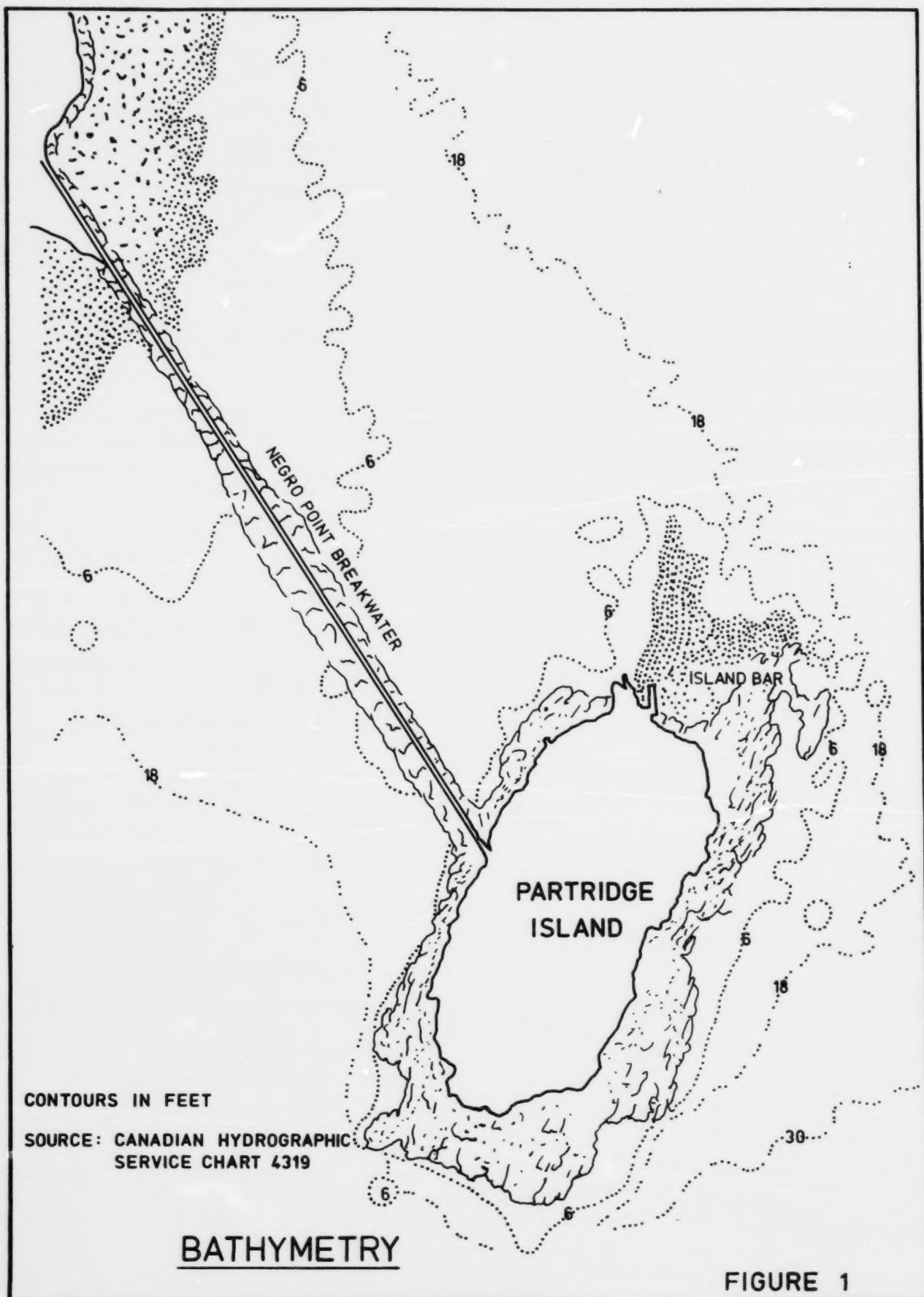
2.1 Shoreline Conditions

Partridge Island is a volcanic ash deposit covered with a thin layer of soil which supports some vegetation. An escarpment, varying in height from 3 m along the southeast shore to 15 m along the eastern shore (heights above the high water mark), separates the relatively fertile zone from the rocky foreshore. The intertidal zone consists primarily of various sized boulders averaging 1 m^2 . This type of beach is difficult, and in places hazardous, to transit. In the furoid zone, between low water and mean water rockweed (*Fucus vesiculosus*) covers the rocks and this slippery covering makes walking treacherous.

At the northern end of Partridge Island an extension of the rocks about 100 m into the harbour has caused an accumulation of coarse sand and pebbles on its shoreward (eastern) side. The greater mobility of this beach cover prevents the growth of seaweed and presents a more suitable area for vessel landings and beachwalking.

2.2 Bathymetry

Partridge Island can be regarded as the emerged end of a rocky shoal that projects southeasterward from Negro Point. Bathymetric features of interest, shown in Figure 1, are the fairly rapid drop-offs on the southern and eastern sides of the island, the shallow banks connecting



the western side to the mainland, and the rather diverse bottom characteristics at the northern end of the island.

Typical slopes seaward from the south and eastern shores of the island range from 1 in 10 to 1 in 50. This sector of the island has an intertidal zone roughly 100 m wide which is about twice the size of that on the western side.

The bathymetry of the northern end of the island indicates a rocky outcropping and the associated deposition of finer grained material. A distinct point of sand and gravel runs north from the existing wharfage approximately 200 m from the shoreline. Although subject to movement by strong currents this bar is recognized as a permanent bathymetric feature.

A man-made armour stone breakwater, reaching from Partridge Island to Negro Point, is the main bathymetric feature in this channel. The breakwater is overtopped during major storms and broaching has been observed during particularly severe events. In general the shelf has water depths less than 18 ft. and can be seen to extend about 500 m to the north and 300 m to the south of the breakwater.

2.3 Erosion

Erosion of the Partridge Island coastal escarpment is due primarily to the freeze and thaw cycle typical of the environment in this area. Exposure of the south and eastern sides to wave action is also thought to contribute to the undercutting of the rock formations.

At the northern end of the island, the current and wave action have been observed to transport the bottom material. It is thought, however,

that while there may be local shifting of the sand, the to and fro motion results in little net movement. There is no conclusive evidence demonstrating any erosion or deposition of significance.

There is insufficient information to assess quantitatively the rates of erosion due to the different processes at work in the area. It can be concluded, however, that the apparent rates at which erosion and deposition are presently occurring are not likely to impact the development of the island.

3.0 PHYSICAL ENVIRONMENT

3.1 Winds

The Bay of Fundy lies in the mid-latitude westerlies belt on the eastern side of the North American continent and is exposed to two general air masses which govern the weather of the region. The continental air mass moves from west to east and the Atlantic air mass moves in from over the ocean. Since these two air masses are very different in character, the region experiences wide fluctuations in weather conditions on a day-to-day and season-to-season basis (Thomas, 1983).

Westerly winds prevail throughout most of the seasons, however, in winter the low-pressure area near Iceland results in prevailing winds from the west to northwest, while in summer the large high-pressure area over the Atlantic from Bermuda to the Azores produces winds from the south to southwest. Deviations from these directions may be caused by local influences. For example, at Saint John, the prevailing summer winds are from the south.

The two prevailing wind patterns differ greatly in strength and character. In the summer months, the winds are moderate except for storms of tropical origin which pass through the Bay of Fundy region or further offshore. Although true hurricanes occur only rarely, occasional tropical storms of less than hurricane intensity can be expected to occur during summer and autumn.

Cyclonic storms of tropical origin have passed directly over some part of the Bay of Fundy on about six occasions during the period from 1946 to 1975. Gates and O'Neill (1977) suggest that based on recent history, there is a 10 to 15 percent probability that a cyclonic storm of tropical origin with winds in excess of 50 knots will affect the Bay of Fundy region in any given year.

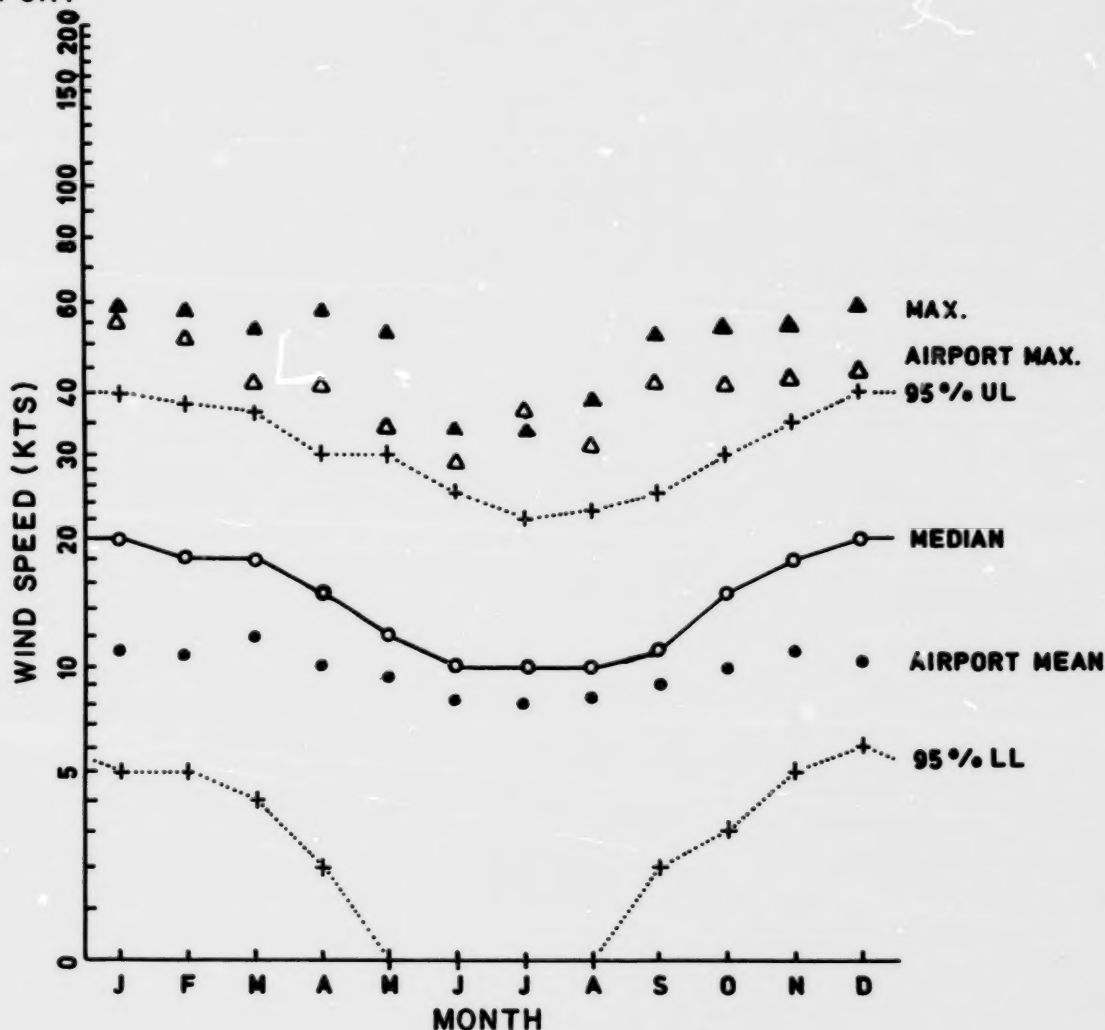
Gale force winds of 34 knots or more occur in the Bay of Fundy from 10 to 15% of the time during the winter months but are extremely rare in the summer (Thomas, 1983). A maximum hourly speed of 60 knots from the southsouthwest and a maximum gust speed of 79 knots from the southsouthwest have been recorded at Saint John Airport for the period 1955 to 1980 (AES, 1982). The seasonal distribution of wind speeds observed by ships in the Bay of Fundy is shown in Figure 2. Also included are the seasonal variations of mean and maximum wind speeds from information gathered at Saint John Airport. It can be expected that Partridge Island should experience wind conditions between those observed at the airport and those observed in the central Bay of Fundy.

3.2 Air Temperature

The mean annual air temperature ranges from 5° to 7°C and shows little variability throughout the Bay of Fundy area (Gates and O'Neill, 1977). The warmest period is usually in July or early August, while the coldest temperatures normally occur from late January to mid-February (Thomas, 1983). Near Partridge Island summer temperatures rise to over 30°C while winter can experience temperatures below -30°C. Average air temperatures at the island are highest in August and lowest in January and the annual range is reduced due to the moderating effect of the ocean (Gates and O'Neill, 1977). However, the effect of the adjacent land mass can frequently be felt which results in the large variation of maximum and minimum temperatures.

MOST FREQUENT DIRECTION

BAY OF FUNDY	NW	W	W	SW	SW	SW	SW	SW	SW	SW	SW	NW	NW
SAINT JOHN	NW	NW	NW	N	SSW	SSW	S	S	SSW	SW	NW	NW	
AIRPORT													



DATA SOURCE: AES ARCHIVES OF SHIP
OBSERVATIONS FOR THE CENTRAL
BAY OF FUNDY REGION AND AES WIND
NORMALS FOR SAINT JOHN AIRPORT

MONTHLY DISTRIBUTION OF WIND SPEED

FIGURE 2

Air Temperatures Measured at Saint John (°C)

	J	F	M	A	M	J	J	A	S	O	N	D
Mean Daily	-6.7	-6.3	-1.3	4.2	9.5	13.9	16.7	16.9	13.5	8.9	3.3	-3.7
Std. Dev. of Mean Daily	2.9	2.3	1.7	1.0	1.1	0.9	1.1	0.7	0.9	0.9	1.2	2.6
Extreme Maximum	13	11	17	24	31	32	32	32	34	29	21	15
Extreme Minimum	-30	-29	-23	-17	-3	2	5	6	-1	-7	-23	-30

3.3 Precipitation

At Saint John precipitation occurs, on the average, about 115 days per year and is fairly evenly distributed throughout the year (Canadian Hydrographic Service, 1979). Rain may occur in any month with a total annual rainfall averaging 1,100 mm.

Winter snowfalls may be heavy and accumulations from single storms can amount to 25 to 40 cm. Rainfalls are seldom heavy, although exceptional rainfalls, usually associated with storms of tropical origin, do occur and in one case, 125 mm of rain fell in the area within a 24 hour period (AES, 1982). Freezing rain or freezing drizzle occurs occasionally during winter inversions when the temperatures near the ground level are cooler than in the atmosphere above.

Precipitation Measurement at Saint John

	J	F	M	A	M	J	J	A	S	O	N	D
Mean Rainfall (mm)	76.4	55.1	63.5	84.1	108.6	88.4	98.7	91.9	110.7	109.9	122.7	99.4
Mean Snowfall (cm)	62.0	49.0	42.0	11.9	0.6	-	-	-	-	1.5	8.5	48.6

3.4 Fog and Visibility

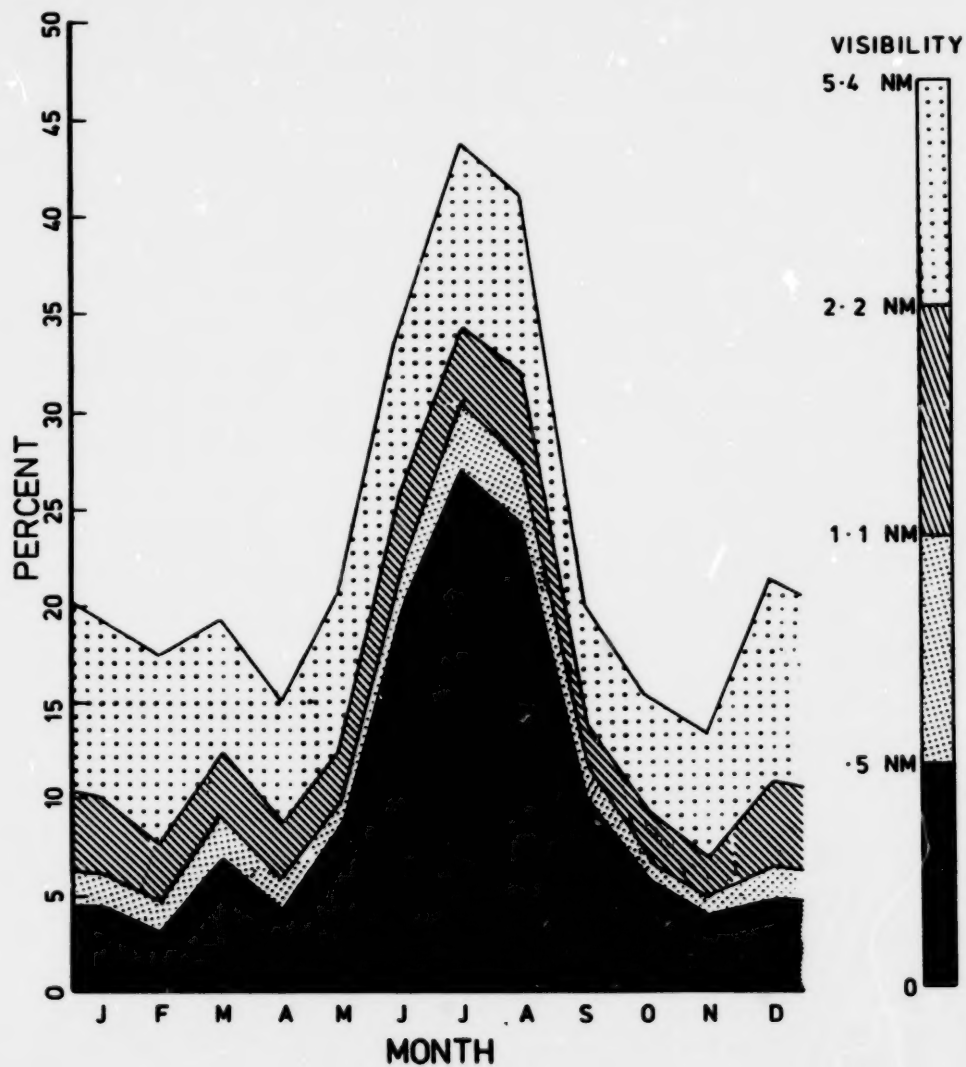
Fog is a notable feature in the vicinity of Partridge Island. In the winter, fog occurs at sea in the Bay of Fundy about two to four days per month but much more often in the summer. Higher frequencies of fog occurrence are experienced throughout the summer, with July experiencing some reduction in visibility, on average, 45 percent of the time. By January, fogs are indicated in only about 4% of the ship reports for that month (Canadian Hydrographic Service, 1979). Figure 3 shows the monthly distribution of visibility as reported by vessels operating in the central Bay of Fundy.

Most fog affecting the Island is advection fog caused by the cooling of relatively warm and moist air associated with southerly winds as they pass over the cold waters which lie between the coast and the Gulf Stream. The southerly winds in such fog situations are of low-to-moderate velocity, usually less than 10 knots. Fog is relatively uncommon if the wind speeds exceed 21 knots (Thomas, 1983).

Fog density varies greatly on a local basis. As such, the conditions at Partridge Island should be further investigated on a site specific basis if fog is anticipated to be a concern.

3.5 Sea Temperature

Sea surface temperatures in the Partridge Island area vary seasonally due to the influence of tidal mixing, vernal warming, spring run-off, autumnal cooling and winter chilling. There are two basic water masses which enter the Gulf of Maine and the Bay of Fundy. Shelf water flows southwest along the Atlantic Coast of Nova Scotia and rounds the southwestern tip at depths of less than 100 m, while warmer slope water is located at the edge of the Continental Shelf. During the winter, the warmer and deeper slope water is mixed with the shelf water as the shelf water rounds the tip of Nova Scotia, due to the intense vertical mixing



MONTHLY DISTRIBUTION OF
VISIBILITY IN CENTRAL BAY OF FUNDY

SOURCE: AES ARCHIVES OF SHIP OBSERVATIONS

FIGURE 3

in this region. The influence of the slope water diminishes towards the head of the Bay of Fundy and results in colder average temperatures. Freshwater runoff from the Saint John River also contributes to the colder conditions in the upper reaches of the Bay and the cold outflow from the Bay along the New Brunswick Coast. In the winter, surface temperatures are lower than temperatures at depth. Between winter and spring, the Saint John River discharge appears as a surface outflow which extends as far as Grand Manan Island. An inflow of slope water increases to maintain the salinity, and the temperature in the deeper water of the central Bay of Fundy increases. From spring through summer, the surface temperatures increase due to solar heating, however, the tendency towards stratification is opposed by vertical mixing. The surface temperatures exceed the temperatures at depth, but between summer and autumn the surface begins to cool while there is a net increase in temperature at depth. Between autumn and winter, cooling occurs throughout the water column and the influence of the slope water at depth increases during this period.

The near surface temperature in the Saint John harbour area can be expected to range from roughly 12°C in September to near 4°C in January. However, extremes recorded in this area reveal winter temperatures as low as -2.0°C (the freezing point of sea water) and as high as 23° in the late summer.

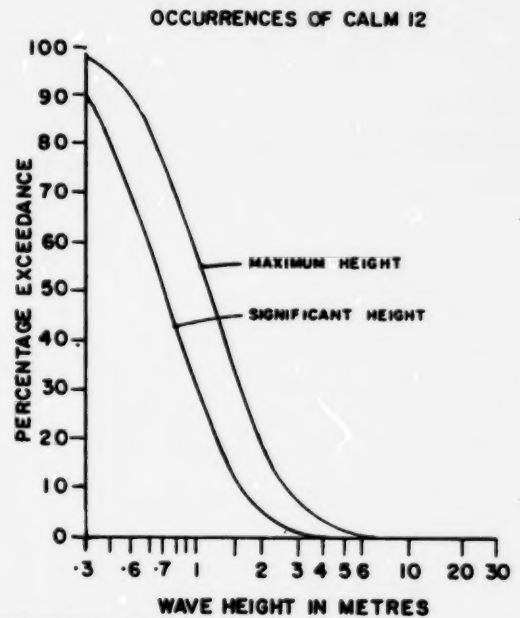
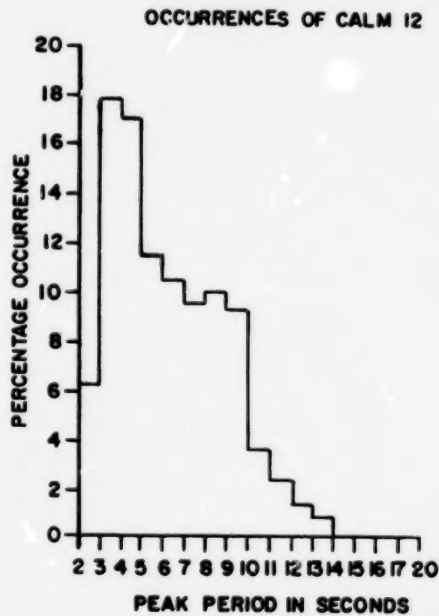
3.6 Waves

In the Bay of Fundy, there are two types of waves which are superimposed on each other: the deep ocean wave which propagates into the Bay from the open Atlantic and the wind-generated wave formed locally in the Bay itself (Neu, 1973). The entrance to the Bay is exposed to the full force of the North Atlantic swell and storm waves, but the importance of waves generated in the North Atlantic Ocean diminishes rapidly due to the narrow shape of the Bay. Located roughly halfway up the Bay, Partridge Island is exposed to both types of wave conditions.

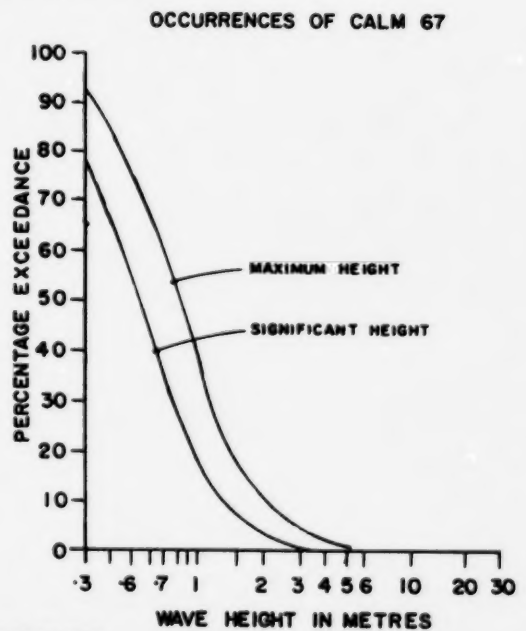
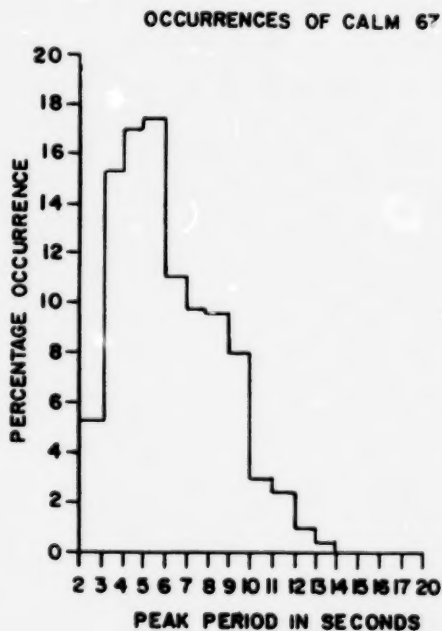
A wave climate study of the Gulf of Maine region prepared by NOAA (1980) indicates a seasonal pattern of large (greater than 3 m) waves propagating from the northwest and west in the winter months, with smaller (2 m or less) waves propagating from the south and southwest in the summer. The median significant wave height for the entire region in winter is approximately 2 m, while in the summer it is about 1 m. Because of Partridge Island's location (on the western side of the Bay of Fundy) it is not subject to the larger waves generated by northwest winds.

The MEDS wave measurement sites at Point Lepreau and Tiner Point are located approximately 40 and 20 km, respectively, southwest of Partridge Island. The percent exceedance of the significant and most probable maximum wave height and the percent occurrence of wave periods for Point Lepreau are shown in Figure 4. The measurements were taken in a water depth of 91 m from May 1975 to June 1976. The percent exceedance of the wave heights and percent occurrence of wave periods for Tiner Point are also shown in Figure 4. The data coverage extends from February 1972 to March 1973, with the measurements taken in a water depth of 31 m. In general, the significant wave height at the island will probably exceed 0.6 to 0.8 m about 50 percent of the time and the maximum wave height will be greater than 2 to 3 m about 10 percent of the time. The most frequently occurring waves have a wave period of three to six seconds and the majority of the waves have a period of 10 seconds or less.

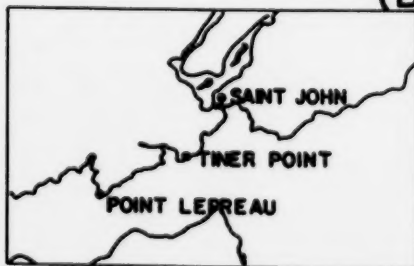
At the island itself, the effects of the sea bottom will affect the wave climate. At the 30 foot bathymetric contour surrounding the island, waves with a period of over 3.5 seconds will have already been modified to some extent by the bottom features. The presence of Partridge Island will tend to refract wave energy onto its southern and eastern sides where the energy is dissipated by breaking. The dredged channel running into Saint John harbour will tend to draw the wave energy which results in larger wave heights, at longer periods, off the northern end of the island. The Negro Point breakwater reflects much of the wave energy



(A) POINT LEPREAU



(B) TINER POINT



DATA SOURCE: MEDS STATIONS 40 & 29

WAVE CONDITIONS IN STUDY AREA

FIGURE 4

propagating from the southwest back into the field of incident waves. Consequently, the waters most sheltered from waves can be found in the V section to the northeast of the breakwater (north west of the island).

3.7 Currents

The surface circulation pattern in the Bay of Fundy is related to that in the eastern half of the Gulf of Maine. Inflow into the Bay of Fundy consists of water from a branch of the Gulf of Maine eddy and from slope water flowing through the Northeast Channel between Browns and Georges banks. The movement of water is inward along the Nova Scotia shore, and outwards along the New Brunswick shore.

Generally it has been agreed that the counterclockwise circulation pattern in the Bay of Fundy is mainly the result of the Coriolis effect on the tides (Huntsman, 1924; Bumpus, 1973; and MacLaren Atlantic, 1977) and the large inflow of fresh water from the Saint John River (Watson, 1936; Hachey, 1952; and MacLaren Atlantic, 1977). As the waters enter the Bay, progressive mixing takes place with the result that the waters at the head of the Bay are thoroughly mixed. The mixed water on the Nova Scotian side flows across to the New Brunswick side to augment the supply of bottom water which is being consumed by mixing with the fresh water inflow from the Saint John River (Watson, 1936; Hachey, 1952).

The tidal currents in the Bay of Fundy show no simple relationship to the tidal range, and are greatly influenced by shoals and islands. These currents run strongly in the flood and ebb directions which are usually parallel to the axis of the Bay. Any veering or set across the Bay occurs only when the currents are weak. The current velocity is generally uniform in the top 50 m and at most locations is unidirectional from top to bottom. The tidal circulation dominates the current regime of the Bay of Fundy, with residual and wind-driven currents being relatively small.

Except for unusual gales, wind is only of secondary importance relative to the tides in determining the residual currents. Based on current measurements near Point Lepreau (see MacLaren Marex, 1979), small-scale fluctuations in the residual current have been found to be related to the wind component along the longitudinal axis of the Bay of Fundy.

The current regime to the north of Partridge Island is determined by the interaction of two, powerful, water flows. Strong tidal streams, resulting from variation in water level of over 9 m during a 12 hour period, and currents caused by the outflow from the Saint John River, combine to form a dynamic water flow system that temporally varies both horizontally and vertically.

The complexity of the current regime at the northern end of Partridge Island is further complicated by the presence of wind and wave forcing. Local knowledge of the current strength and direction is considered, at present, to be the most useful source of information. Discussions with mariners familiar with the area indicate a great deal of caution is required in transitting this area, that manouvering is difficult and that mooring a vessel can be treacherous. Access to the Island's marine facilities is generally carried out during slack high water and the vessel winched onto a landing ramp.

In summary, the current regime in the vicinity of Partridge Island has yet to be investigated to analytically determine the effect of the forces that influence it. Consequently, the judgement and knowledge of local mariners must be taken into account when decisions concerning the water flow are being considered.

3.8 Water Levels

The Bay of Fundy has long been known to have the greatest tidal range in the world. The large tidal range at the head of the Bay has

been explained as a combination of various factors. The narrowing and shallowing of the Bay of Fundy further amplifies the tide which has previously been amplified by passage over the shelf from the open ocean. The tides are fundamentally of the standing wave type, with the tidal amplitude increasing with distance from the mouth of the Bay.

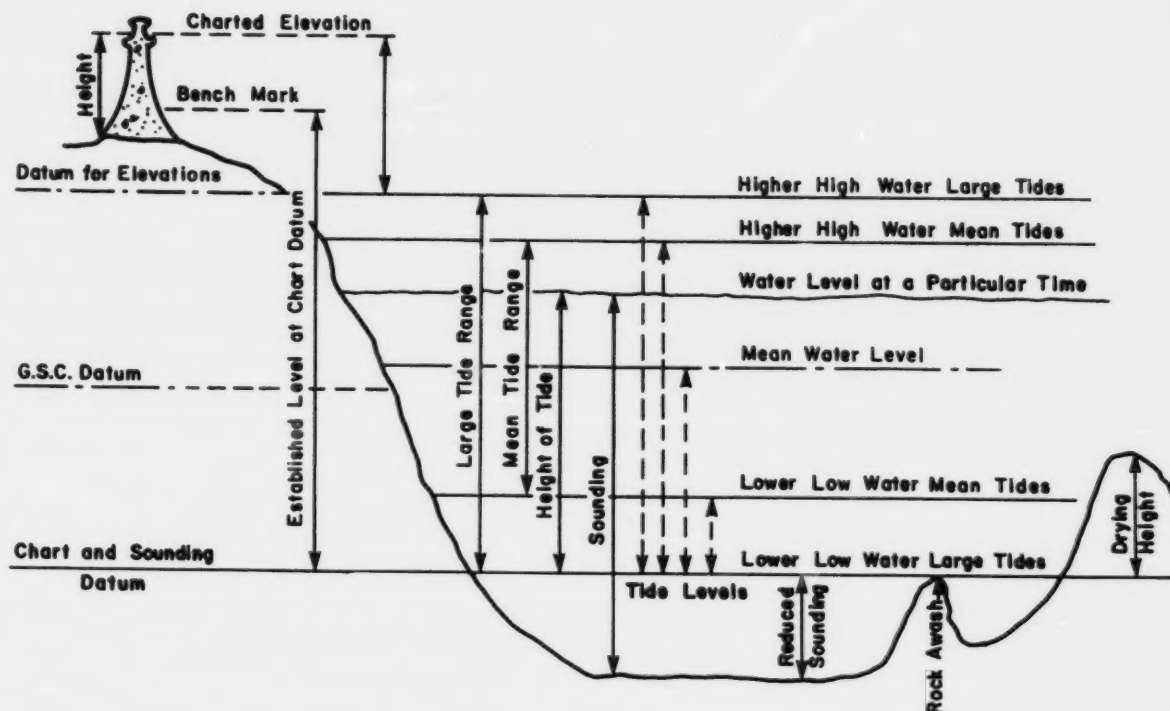
In Saint John harbour, the mean tidal range is 5.1 m which increases to 9.1 m during spring tides (at roughly two week intervals). Figure 5 shows the water levels of interest at Saint John harbour. Winds of unusual strength and direction can cause local increases in the water level up to several metres known as storm surge although, due to the large tidal range, this phenomena has a reduced affect near Partridge Island. The highest water level recorded at Saint John harbour is just 0.1 m above the high water mark for spring tides. Although the joint possibility of the occurrence of high tide and a storm surge is slight, it requires further investigation prior to the construction of 'permanent' facilities.

3.9 Ice

Ice formation in the Bay of Fundy occurs from December through early April when air temperatures are below freezing (see Owens, 1977). Ice forms as shorefast ice in embayments on the beaches and in the intertidal zone, or as drifting ice floes on the water surface.

During the winter the sea surface temperatures of Saint John harbour are seldom low enough to freeze and the harbour is open to shipping all year. Any ice formation is quickly broken up due to wind action and the strong tidal currents. Drifting ice can accumulate along the north face of the Negro Point breakwater which can occasionally interfere with the land or launching of vessels at the wharf on the north end of the island.

For most purposes, Partridge Island can be considered to be ice-free throughout the year.



DEFINITIONS:

- (a) H.H.W.L.T. - Higher High Water Large Tides - is the highest predictable tide from the available constituents, with the astronomical factor(f) close to unity.
- (b) H.H.W.M.T. - Higher High Water Mean Tides - is the average of the predicted heights of the higher high waters of each day.
- (c) L.L.W.M.T. - Lower Low Water Mean Tides - is the average of the predicted heights of the lower low waters of each day.
- (d) L.L.W.L.T. - Lower Low Water Large Tides or Lowest Normal Tides(L.N.T.) - is the lowest predictable tide from the available constituents, with the astronomical factor(f) close to unity.
- (e) M.W.L. - Mean Water Level - is the average of hourly water levels for a period of observations.
- (f) M.S.L. - Mean Sea Level - is the average of hourly water levels for a period of several years of observations.
- (g) M.T.L. - Mean Tide Level - is the average of all the high and low water heights over a period of observation.
- (h) Charted Elevation - is the vertical distance between an object and the reference plane of higher high water of large tides.
- (i) Height - is the vertical distance between the top of an object and ground level.
- (j) Charted Depth - is the vertical distance from the chart datum to the bottom.

SAINT JOHN

-	9.0m
-	7.7m
-	1.0m
-	-0.1m
-	4.4m

WATER LEVELS AT SAINT JOHN

FIGURE 5

4.0 MARINE TRANSPORTATION FACILITIES

There are three means of access to Partridge Island; by air via helicopter, by land via the breakwater, and by water. The following section deals with existing and potential locations for facilities designed to deal with marine transportation.

4.1 Existing Structures

The Negro Point breakwater is the most substantial marine structure at Partridge Island. Constructed of large armour stone, the 1000 m rubble mound breakwater is shore connected at Negro Point on the mainland, and at the midpoint of the western side of the island. Due to severe wave conditions some repair work, in terms of stone infilling, has been carried out. Typical winter storms are believed to cause some minor movement of the breakwater.

At the north end of the Island is a smaller rock cribbed wharf in a state of disrepair. A wharf and landing ramp, in the same general area, are in a similar condition. The existing marine facilities include a davit for hoisting small boats and a winched marine railway for vessels up to roughly 20 feet in length. These structures are not suitable for permanent access to the Island.

4.2 Potential Areas for Marine Terminals

The siting of future marine facilities, on the basis of environmental considerations, is most likely to be in the area between the existing wharfage and the Negro Point breakwater. This coastline is well protected from waves and winds, is the closest point to the port of Saint John, and is free from submerged reefs. It suffers from a high escarpment to the island plateau, ice accumulation, and a highly variable and strong current system.

The most suitable location for a marine terminal is the site of the existing facilities. The location has a service road that allows easy access to the interior of the island, variation in currents and water levels are known, through experience, under most operating circumstances, and vessels transporting visitors to the island would avoid exposure to swell waves propagating from the Bay of Fundy.

The development of docking facilities which would allow marine access to the Island under the full range of environmental conditions can be expected to be very costly. A fixed wharf structure, which would allow docking under the full tidal range, would require careful consideration. Strong tidal currents and winds in the area (as reported by local mariners) would make the construction and use of a floating dock structure equally difficult.

Additional analysis would be required to assess the suitability of the Negro Point Breakwater for access under the full range of environmental conditions. The breakwater is known to overtop as presently constructed and there remains little doubt that the structure would have to be raised and widened to provide safe access during extreme events.

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APPENDIX D
TECHNICAL APPENDIX ON
TRANSPORTATION SERVICES

CONCEPT DEVELOPMENT AND FEASIBILITY STUDY
FOR PARTRIDGE ISLAND

July, 1986

1.0 Introduction

This appendix provides a review of critical information relating to transportation aspects of potential tourism development on Partridge Island. This appendix presents a review of existing passenger transportation service to the Saint John area. This includes a general review of regional transportation services to Saint John for both the private automobile and public passenger transportation opportunities which are available on existing scheduled services. The public transportation component includes regional, national and international air, rail, bus and marine/ferry services to Saint John.

Key features of the existing municipal street infrastructure which are relevant to potential development of the island are outlined. This is followed by sections identifying constraints/conflicts regarding development of transportation services to the island and a brief review of options for potential access to Partridge Island. Future transportation requirements will be dependent on the nature and extent of development which might occur on the island.

2.0 Regional Passenger Transportation Services

2.1 Private Automobile

Private automobile travel is a major mode of arrival for potential users of a Partridge Island development. Saint John is conveniently located on the arterial highway system in New Brunswick. This system of primary highways provides road access to all major centres throughout New Brunswick as well as connections to major population bases in the remainder of the Atlantic Provinces, other Canadian provinces and the United States.

Access to the adjoining potential market sources is provided primarily by arterial Route 1 connecting eastward to Moncton and the rest of the Atlantic Provinces and westward to the United States via border connections at St. Stephen/Calais. This route also provides a connection through the state of Maine to the Montreal area and Canadian points westward. The other main access route for connections west of New Brunswick are via Route 7 and the Trans Canada Highway (Route 2) connecting to the Quebec provincial highway system at Edmundston. Although this is longer than the route through Maine, it is a better highway (at least for the portion west of Riviere-de-Loup).

The general Saint John area is directly accessible to the arterial highway system (Route 1) which runs through the centre of the city. Several accesses to the Route 1 Throughway are provided at various locations along this urban transportation corridor.

2.2 Public Transportation

The Saint John area is served by the three basic modes of public transportation. The mode which is most attractive for the long distance passenger traveller is air service. The bus and rail modes also provide connections to points of a local, regional and international nature. In

addition, the ferry service provided between Saint John and Digby enhances the private automobile, as well as potential charter/tour operations, between the Saint John area and Nova Scotia. This is relevant not only to the resident regional demand which might be generated from these areas but also as it relates to package tours for groups visiting the Maritimes from external locations in Canada and the United States.

Table 1 provides a summary of the public passenger transportation service opportunities to and from Saint John. This table is an overview of the scheduled public transportation services available to and from Saint John during the current summer season. The information in this table clearly indicates the extent of opportunity for public transportation access to Saint John.

Air

Air service is the mode of greatest importance regarding long distance passenger transportation. This is true for the more distant potential market areas because of the greater speed and ease of accessibility afforded by this mode. Although rail and bus service is available, these modes are generally less attractive than air for the more distant market sources. It is reasonable to assume that the potential market from more distant locations would not utilize rail and bus service as much as air service. This comment is true with the exception of the groups which could be attracted as part of package bus tour opportunities.

Reviewing Table 1 it is evident that for the major Canadian market areas of Montreal and Toronto and westward, Saint John is served by a minimum of three flight per day each way. The Toronto air service includes five flights opportunities per day to Saint John. Similarly, there are two flight opportunities per day to and from Ottawa. However, some of the Toronto flights are via Halifax, which is not the most attractive routing.

The potential market area in the eastern United States is accessed by one daily flight each way between Saint John and Boston. This provides a

Table 1

SUMMARY OF PUBLIC PASSENGER TRANSPORTATION
SERVICES TO/FROM SAINT JOHN*

Mode	Potential Market	Characteristics of Transportation Service
	Catchment Area	
Air	Toronto	Five flight opportunities per day to Saint John and three flight opportunities per day from Saint John
	Montreal	Three opportunities per day each way
	Ottawa	Two opportunities per day each way
	Boston	One opportunity per day each way
	Halifax	Four opportunities per day each way
Rail	Montreal	One opportunity per day each way
	Halifax	Four opportunities per day each way
Bus	Central Canada	Two opportunities per day each way
	Eastern United States	One opportunity per day each way
Ferry Service	Saint John/Digby	Three trips per day each way except for Sunday with two return trips

* Based on 1986 Summer Schedules.

mechanism for connections to other points throughout the eastern United States. For markets in the western United States and Canada, connections through Toronto and Montreal are also available.

Within the Atlantic region, Saint John's primary air service connection is through the major regional hub at Halifax for which there are four opportunities per day each way. It should also be noted that connections for overseas locations are available through Halifax as well as Montreal and Toronto.

Rail

Via Rail provides scheduled passenger service to and from Saint John connecting with Montreal and Halifax. The service to Montreal results in one train per day each way with two opportunities per day to and from Halifax. Connections to Toronto and other points westward can be made at Montreal.

Bus

Although not as attractive for long distance travel, scheduled bus service is available at Saint John. The bus service between Saint John and central Canada results in two opportunities per day each way. Service to the United States via Route 1 to St. Stephen/Calais and southwards along the eastern seaboard of the United States is available with one scheduled service per day each way.

Ferry

The ferry service between Saint John and Digby provides an opportunity for road traffic connecting between New Brunswick and Nova Scotia (and to a lesser extent from Maine via the Yarmouth-Bar Harbour ferry). The ferry terminal for this service is located on the west side of Saint John Harbour near the breakwater connecting Partridge Island to the mainland at Negro Point. This ferry service provides three trips per day each way with the exception of Sundays.

The information summarized in Table 1 provides an overview of the scope of scheduled public transportation services available for the potential patrons of development on Partridge Island. This information indicates the range of opportunities for accessing the Saint John area from various regional, national and international market areas. Although the timing and routing patterns may be less than ideal in some cases, the Saint John area nevertheless has generally good public and private transportation accessibility from a broad spectrum of potential market areas.

3.0 Municipal Transportation Infrastructure

The closest immediate surface access to Partridge Island is via the city street network leading to the end of the breakwater connecting the island to Negro Point. If direct (non-water) surface access is to be provided, the obvious location for this access would be from this general location.

From a transportation perspective, on-site investigations indicated that the street infrastructure in this area is appropriate and adequate for general access to a potential shore-based terminal development in the Negro Point area. Access would be from the Saint John Throughway to City Line which connects to the municipal arterial, Lancaster Avenue, and via Saint John Street and Market Place to the interchange with the Throughway at the west end of the Harbour Bridge.

A review of traffic volume data maintained by the City indicates that streets in the area have the capability of accommodating any anticipated demands which might be associated directly with the development of Partridge Island. This route is already utilized as the access to the CN Marine Ferry service between Saint John and Digby, Nova Scotia.

4.0 Potential Conflicts with Development of Transportation Services of Partridge Island

There are three potential conflicts with existing and potential future transportation activities in the Negro Point area which might be developed to accommodate a land-based terminal area for access to Partridge Island. These are:

- a). the CP Rail yards at Negro Point;
- b). the construction aggregate activities at Negro Point; and
- c). the long range development of the port facilities in Saint John Harbour.

Existing development at the Negro Point area is not ideal for development of a terminal facility for either pedestrian or vehicular access to the island via the existing breakwater facility. This should not imply however, that appropriate terminal facilities could not be developed. The existing development in this area is a mixture of older residential facilities adjacent to a major rail freight marshalling yard and a construction aggregate operation. The CP Rail yard at this location is that company's primary rail marshalling/shunting facility in New Brunswick. This facility is also the main switching yard for all CP Rail freight traffic at the Saint John port area. Consequently, this facility is a major component of the CP Rail infrastructure and operations and is expected to continue to provide this important function indefinitely.

The other activity adjacent to this potential site for development of a mainland terminal access to Partridge Island is the construction aggregate operation associated with McNulty Cartage Ltd. This operation is located immediately south of the CP Rail yard. Contrary to the situation regarding the CP Rail yards, this business could be relocated, with appropriate compensation, to allow development of a shore-based terminal facility for access to Partridge Island.

The long range master plan for development of cargo facilities in the port of Saint John includes provision for expansion of cargo storage and berthing facilities on the east side of the breakwater between Negro Point and Partridge Island. These long term plans could substantially impact on opportunities for development of Partridge Island as a tourist centre. Although the growth in cargo activity in the port of Saint John will not necessitate development of this component of the overall port master plan in the immediate future, this potential long term conflict should be noted.

5.0 Access Opportunities

5.1 Existing Access

Existing access to the island is provided by the only tour boat service, DMK Marine Ltd., which is active in the Saint John Harbour. This business operates a variety of vessels used in various functions relating to servicing marine operations in the Saint John area. One of the vessels operated by this company is a passenger vessel and is certified to accommodate up to 40 passengers on trips as far as Partridge Island. This vessel is already periodically utilized for visits to Partridge Island. This type of service from areas such as Market Square could provide the base for passenger service to the island. The size and characteristics of the ferry/tour vessel necessary to provide this service will be dependent on the level of demand.

5.2 Future Access Options

Obvious access opportunities for Partridge Island development are related to either:

- a). utilizing the existing breakwater between the island and Negro Point; or
- b). the direct water access between the island and other terminal location(s) in the Saint John Harbour area.

Use of the existing breakwater structure to Partridge Island presents some problems but it appears that this option is technically feasible. Such an option would require fairly extensive capital investment to provide not only the upgrading of the breakwater facility to accommodate pedestrian and/or small vehicle transportation but also, to provide an appropriate terminal and secondary visitation centre at Negro Point. A preliminary estimate* of the cost to upgrade the breakwater to accommodate a single lane for pedestrians and/or small vehicles is about \$2.3 million.

* Based on a 1985 estimate prepared by Jacques, Whitford and Associates Limited.

Development of access could include passenger access by means of a ferry service adjacent and parallel to the breakwater as an alternative to utilizing the structure for pedestrian or vehicular movements. This assumes operations of a ferry adjacent to and on the lee (east) side of the breakwater.

Water access opportunities also include development of ferry/tour boat access between the island and several potential terminal areas in the Saint John Harbour. The possible mainland terminal areas would be at Negro Point, at or adjacent to the existing CN Marine Ferry Terminal facility just north of Negro Point and at the Market Slip float development adjacent to Market Square. All of these facilities have technical merit but require further discussion regarding the features of potential development on the island as well as the general concept for the land based components of overall development of Partridge Island.

Key requirements for such a water-based service will be appropriate floating dock facilities at both the mainland terminal and on Partridge Island. One obvious location for mainland facilities is at Market Slip since this is a major focal point of activity in the downtown Saint John area. It is also close to hotel and parking facilities.

On Partridge Island, the opportunities for development of tour boat/ferry terminal facilities is limited because of the exposed conditions at the island. The area between the existing wharf facility at the northeast end of the island and the outer end of the breakwater connecting the island to Negro Point is the obvious location for such a terminal facility. Even in this area, careful consideration will have to be given to the current patterns which vary depending on the stage of the tide. Discussions with local vessel operators, however, indicates that conditions in this area would allow operation throughout all but the most severe weather conditions.

APPENDIX E
PARTRIDGE ISLAND:

an historical commentary

1. This commentary is designed to provide historical insight into the possibility of establishing a park on Partridge Island. It is not a history of the island, nor is it an attempt to exhaust the historical potential of the island. Rather, it is an exposure of the most obvious lines of development which might be pursued should a park on the island become a reality.

2. The geographical setting of the island has recommended it to human use from the earliest days. It figured in local native legend, and was an obvious point to be used by settlers established at the mouth of the St. John River. It was used, as opposed to occupied, during the French period, most notably as the base for d'Aulnay's assault on the La Tour trading post at what is now Portland Point. The English and Loyalist settlers in what is now Saint John continued this use, but it was not fully exploited until the 19th Century, when Saint John had evolved into one of the most important ports in British North America.

The geographical location of Partridge Island made it convenient for the use of the people of Saint John, but it is important to recognise its geographic limitations. There are geographic points which, because of

their general or particular location or nature are historically strategic. The narrowing of the Thames virtually determined that a city would evolve where London now stands. Similarly, the promontory where the St. Lawrence narrowed was strategic in fixing the centre of French power at Quebec rather than at the older site of Tadoussac or the newer at Montreal. Locally, the very existence of the rocks in the Reversing Falls (rather than the gorge) ensured that the principal port would be below those Falls and therefore exposed to hostile sea operations. In terms of wooden ships and smoothbore cannon, Saint John was relatively easy to defend. But had the rocks in the Falls not impeded easy navigation, Saint John would have been moved inland to Milledgeville or at least to Indiantown, making a naval assault virtually impossible. The ramifications for the history of the province would have been substantial.

Partridge Island does not compare with any of these sites by virtue of its geographical location or even its existence. If it had not existed, the history of Saint John and the province would not have been effected. The importance of Partridge Island, therefore, is in its use as a convenience by the people of Saint John or by people acting on their behalf. It has no history which is not bound intimately with that of the City of Saint John, and therefore, it must be seen as a potential mirror for much that was importance to that City.

3. The single most important use to which Partridge Island was put by the people of Saint John or their sponsors was defensive. The island stands as an outpost of the harbour, rather than as a part of it. It had no use in the growing commerce of Saint John, but it did have tactical value.

D'Aulnay used the island as an assault base, but during the British period, it was turned into a bastion to defend the harbour, its commerce, and its city. With defensive works and a garrison, Partridge Island could protect the harbour from sea-borne assault, something which was noted as early as 1800 by the Duke of Kent, who was the father of Queen Victoria. Then as now, governments wait for a real threat before protective measures are taken. Thus it was not until the outbreak of the War of 1812 that serious fortification of the island was undertaken.

During that war, Partridge Island was the key to the protection of Saint John Harbour. The works consisted of a blockhouse and earthworks for a battery on the highest point of the island. The garrison was modest: three officers and sixty other ranks. It is perhaps fortunate that the protection afforded by the island's battery and garrison was not tested by the Americans. From that point onwards, there was a continuous military presence on the island, even if it was passive for certain periods. In 1832, the works on the island became the focal point for the militia artillery battery in Saint John, which trained from time to time on the guns which were apparently still in place. In the late 1840s, the works were improved as the authorities once again took defense seriously. There was no direct threat to any part of British North America until 1861, when the American Civil War threatened to pull Britain into conflict with the Union government. Briefly, Fort Dufferin, at Negro Point, eclipsed the Partridge Island works in importance, but they were not abandoned until after the threat from the Fenians in 1866.

It was not until 1914 that the island was re-fortified in response to the threat from Imperial Germany, which then boasted a navy outranked only by that of Britain. New and modern batteries were constructed on the

island to protect the harbour against surface raiders, and later, U-Boats. These batteries were maintained under military control for some time after the "war to end all wars", but they had so deteriorated that when the next global conflict broke out in 1939, it was necessary to begin again. This time the threat was seen to be more severe. U-Boats were a genuine threat in this later conflict, and the batteries on Partridge Island were part of a broad defensive scheme which united gunsites from Mispic to the breakwater in Courtney Bay, all controlled from that other relic of the War of 1812, the Martello Tower on Lancaster Heights. The battery on Partridge Island was as formidable in its own context as any defensive establishment in Saint John had ever been in its own context. The guns may have been old, but their deterrent value made Saint John one of the best defended ports in Eastern Canada aside from the powerful fortress at Halifax.

This military theme is one of critical importance if any park should be established on the island. The most important single feature is that military works draw visitors, who like to see and touch real items like guns, and walk through earthworks and magazines. The attitude that the public often does not recognise what is truly important should receive little attention. As a "drawing card", Quebec, Halifax, and Louisbourg demonstrate that cannon and fortress walls are almost unbeatable. The military presence on the island can be used to reflect several periods in Saint John's past, and drive home the fact that the city's commercial importance rated such defense from the earliest days.

Three periods can be exploited in this manner. The first, ie. the War of 1812, is one which can utilise the colour associated with the Napoleonic period. The garrison on the island would have been uniformed in artillery blue, a fitting contrast with the scarlet used by the soldiers at

Martello Tower. It should be possible to restore at least one of the bastions of the 1812 period and use it as a basis for establishing the historical links between the island and that period.

The mid-century period might be better exploited at the site of Fort Dufferin, of which more later. Some of the gun platforms at Dufferin are restorable, and the same might be said of the magazines. This would preclude the possibility of over-development on the island itself.

The period 1939-1945 should also be highlighted. Most of the installations from that period could be restored with little difficulty, and it should be possible to re-mount the "Niobe" guns in their original locations.

There should be no attempt made to restore all of the military sites to anything like their original condition, in part because they would crowd one another as well as the other sites on the island which should be exploited.

To accentuate the development of the defenses of Partridge Island, it should be possible to display, in a suitable reception area, a series of three-dimensional illustrations of the island through various periods, and restore a little of each on the island itself. This would save money, and be comprehensible to the vast majority of visitors in a way which actual reconstruction could not be on a multi-layered site. Another possibility would be to utilise a site on the island itself as a military museum which could serve to illustrate the various periods.

The military aspects of the island are obvious, easily exploited, and critical to an understanding of Partridge Island, and more importantly, of the strategic importance attached to the commerce which it defended.

4. To the community at large, Partridge Island is even better remembered as "the place where the Irish landed". This is in reference to the island's use for over a century as the chief immigrant reception and quarantine station. The number of immigrants who passed through Partridge Island on their way to the New World is in the range of seven digits. A more precise figure would be difficult to arrive at but is hardly necessary to establish the importance of the island as the doorstep to Canada.

As with the military role, the immigrant status of Partridge Island was conferred because of its convenience to the city. Especially during times of "immigrant fever", such as 1832, 1847, and 1854, it was important to shield a city with little resistance to communicable diseases from immigrants who were not certified to be healthy. Hence, Partridge Island was an ideal location for quarantine facilities.

The Irish were not the only immigrants who passed through Partridge Island, in fact, they were not even the majority, but no other ethnic group can be so readily associated with the island as can be the Irish. A visible reflection of this is evident to any observant passenger on the Digby Ferry. The average passenger might not know its significance, or even what it is, but he could not help but see (on a fogless day) the Celtic Cross which was raised as a memorial to the Irish immigrants. Not all of the Irish immigrants who came to New Brunswick passed through Partridge Island, but nonetheless, it has become a spot which is almost sacred to all those of Irish extraction throughout the Province. It has an emotional "pull" which is difficult to explain, or to explain away. Nothing of the nature of an historic park on Partridge Island could be attempted politically without a major development of the immigration theme, and this would necessarily (but not exclusively) centre upon the Irish.

This theme cannot be developed as easily or as obviously as could the military theme, but it could be an important attraction for tourists. There are literally tens of millions of people in Canada and the United States whose ancestors passed through Partridge Island, whether they know it or not.

A replica of a fever hospital could be built which could fulfill a number of functions. The actual conditions of the hospital itself depicted, and this could serve as a vehicle for illustrating medical history throughout the period in which the island was used for quarantine purposes. This building could also house a museum dedicated to immigration throughout the entire period as well. But most promising would be a centre for geneology.

The immigrant records for the island could be concentrated, lists of arrivals compiled, and a computer-based retrieval system brought into being. It would not be necessary to actually house the archival base on the island, modern technology could link terminals to a mainland computer for this purpose. It might be possible to expand this geneological base at some future stage if it proves necessary and advisable. This feature would also mean a year-round staff, and mainland facilities accessible on the same basis.

The provision of some continuing link with the Irish community is also in order. This should not dwell on "Black '47", but should rather focus on the contributions and achievements of the Irish to Canadian and American society - American, because so many of these Irish immigrants or their immediate descendents passed along to swell the large Irish community in the United States, which would be a source of potential visitors. A portion of the replica fever hospital could be devoted to this end.

The Celtic Cross on the island has for too long been a lonely symbol of this important role of Partridge Island.

5. The final feature of historical importance is marine technology. The importance of the island to navigation was recognised by the Loyalists, who erected signals and warning guns on the island to assist navigation. There have also been a series of lighthouses down to the present. But perhaps the most important name associated with this aspect of the island's past is that of Robert Foulis. It was Foulis who developed the steam fog-horn, and this contribution could serve as a focus for a museum of marine technology. The possibilities here are limited only by the imagination, because Saint John has been so intimately linked to the sea and its various forms of bounty. It was the period of Foulis in which Saint John achieved its greatest importance as a port, and this could be exploited in a generous way. The concentration should be centred on signals, warning-guns, lighthouses, and foghorns in a manner appropriate to the island itself. To deal with these alone would be a large task, but some more general context of the port of Saint John must also be provided.

6. The undersigned is aware that all of the above will cost money, and also that such a park could not emerge overnight. It must be developed by stages which will extend over a protracted period of time. In a sense, this is probably advantageous. In order to protect the historical integrity of the island, and to ensure authenticity at all stages, it is essential that

the difficult background work begin long in advance of the actual physical development. The only capital intensive work which should be attempted with any haste should be the preservation of the existing sites on the island and its approaches.

If such a park is to have any historical authenticity, and therefore credibility, it must be developed under close control of the professionals of Historical Resources. The staff, which should eventually include historical, archaeological, and restoration expertise, should be appointed BEFORE any work takes place. Preservation, restoration, and development should be attempted only AFTER they have done a professional study of the resources and proposals. This staff could be small at first, but when actual work begins, should swell to ensure appropriate development of the park. The staff should continue to have a professional core which could be supplemented on a seasonal basis.

It would be pointless to have a proper historic park on the island if the island were to remain inaccessible. Perhaps the Irish did not object to arriving by boat, but their descendents would not endure the same conditions in worthwhile numbers. This means that the area of Fort Dufferin would be needed for proper park development, and that the breakwater would of necessity be widened to provide vehicular access. From the above, it would not make sense if half the island were to be turned over to a parking lot, which means that some form of shuttle service must be provided across the breakwater/causeway. The Fort Dufferin area could serve as a convenient reception area, and could be preserved and developed in its own right as an adjunct to the island. The reception area could also serve as the year-round base for the permanent staff and facilities. This being the case, the island itself could be reserved for its historic

sites as much as possible.

7. Partridge Island is an incomparable location for the celebration of so much that has been important to the development of Saint John and the Province of New Brunswick that the time is long since past when the public should have been granted an authentic, subtle, and sensitive access to the wealth of memories which have been crowded onto its rocky shores. It would be a tragedy to pass on this obligation to yet another generation.

respectfully submitted

A handwritten signature in dark ink, appearing to be 'P.M. Toner', with a long horizontal line extending to the right.

P.M. Toner, Ph.D.

The University of New Brunswick
in Saint John

9 July 1986

APPENDIX F
TRANSPORT ACCESS MODE COSTS

F1. Helicopter Costs

Bell 206 4 passenger
 Bell 206 Long range 6 passenger

Capital Cost: New - \$600,000

Operating Costs:

Insurance \$90,000/year
 Fuel \$70/hour
 Components \$100/hour
 Pilot \$40,000/year
 Maintenance Contract
 Operating Cost Approximately \$500/hour on Charter

SOURCE: Versatile Air Services Ltd., Sydney, Nova Scotia

Sikorski 61 28 passengers, New \$4 million U.S.
 long term contract \$1,800-\$2,000/hour
 Offshore \$100,000/month + \$500/hour to
 cover expenses

Sikorski 76 12 passenger, New \$1.8 million U.S.
 \$1,200 - \$1,500/hour

Bell 212 10 passenger New \$2 million U.S.
 \$1,000 - \$1,200/hour

Puma 19 passenger New \$6 million U.S.
 \$2,500/hour

Bell 206 New \$500,000 U.S.
 Long Range \$500/hour

Used versus leased market open. Could be purchased for 1/2 new price. Must be I.F.R. equipped. Fog a problem in the Bay of Fundy.

SOURCE: Okanagan Helicopters, Halifax, Nova Scotia

F2. Hovercraft Costs

SOURCE: Mr. Jones, I.C.E. Inc., Toronto, Ontario

Model 163

20 passengers plus bathroom
 30 knots (35 knots in calm water)
 will handle 4 ft waves
 diesel engine
 30 inch clearance

Cost: \$200,000 (\$ Canadian)
 amortized over 5 years - \$50,700/year (10% interest)

Additional Costs:

Insurance \$100,000/year
 New Skirt \$ 5,000/year (requires 1 per year)

Yearly cost on an hourly basis assuming
 2,000 hours/year= \$32.85/hour

Other Operating Costs:

Fuel @ \$3/gallon (uses 13 gallons/hour)	=	\$ 40/hour
Crew	=	\$ 25/hour
Maintenance	=	\$ 5/hour
Total Operating Costs	=	\$102.85/hour

Model 159

60 passengers + small vehicles
 55 knots

Cost: \$800,000 (\$ Canadian)

Amortized (10% interest) over 5 year = \$200,000/year

Additional Costs:

Insurance	\$75,000/year
Skirt	\$20,000/year (1/yr)
Cost assuming 2,000hr/year operation	\$ 147.50/hour

Other Operating Costs:

Fuel	\$120/hour
Crew	\$ 40/hour
Maintenance	\$ 15/hour

Total Operating Cost \$323/hour

Advantages

- . can operate in fog
- . not affected by tides (i.e. can run up on beach)
- . used for coast guard duties (e.g. Saudia Arabia)
- . can be operated in areas where shallow marine conditions exist and also deep water
- . trip to Partridge Island by hovercraft would be in order of 5 minutes (compared to 20 minutes by boat)
- . passengers not affected by seasickness.

Disadvantages

- . hovercraft are noisy

Comments:

I.C.E. would consider leasing a 163 machine (depending on operating conditions) for \$25,000 - \$30,000/month WET (i.e. operational, includes crew etc.)

Would also consider leasing on a profit sharing basis providing they made a profit.

I.C.E. are extremely flexible regarding terms.

They have operated in northern British Columbia and Manitoba.

F3, Tour Boat Costs

SOURCE: John Jenkins, McNab's Island Ferry, Halifax, Nova Scotia

Operates: 2 boats

1) "Shoreham"

- . carries 80 people
- . crew of three

Capital Cost: \$3/4 Million (new)
 \$100,000 (used)

Operating Cost: \$50/\$60/hour

2) Smaller Vessel

- . carries 40 passengers

Capital Cost: \$80,000 (new)
 \$30,000 (used)

Charge: \$6.75 for return trip (group discounts available)

Comments:

- . McNab's Island has area of 1,200 acres (3 miles long)
- . Ferry service started 6 years ago
- . need to make full use of boats in order to make them pay (e.g. combines ferry service with harbour tours, charters etc.)

APPENDIX G - POTENTIAL PROJECTS
PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Breakwater Rehabilitation - Concept B

DESCRIPTION

Upgrading of the existing breakwater in order to provide fixed link access and right of way for shuttle service (only required under the fixed link scenario).

POTENTIAL SPONSOR

City of Saint John
Government of New Brunswick
Government of Canada

OTHER FUNDING SUPPORT

Private Sector (shuttle service operator)

COST:

CAPITAL

\$3,000,000 including access ramps

OPERATING

Unknown, depends upon type of reconstruction

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Fixed Link Shuttle Service - Concept B

DESCRIPTION

Provision of a transportation service to move visitors between the Fort Dufferin area and the Island. This service could be based on a variety of modes, including streetcar, bus, mini-van etc.

POTENTIAL SPONSOR

Private Sector

OTHER FUNDING SUPPORT

Canadian Rail Historical Association (may provide assistance if heritage streetcars are used)

COST:

CAPITAL

Rail: \$200,000

Bus/Van: \$30,000

OPERATING

BUS/VAN: \$15,000 per 16 week season including student driver.
(4 trips per hour, eight hour day), seven days per week)

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Fog horn - Concept A & B

DESCRIPTION

Restoration and interpretation of the fog horn. The horn could be operated on a schedule to demonstrate its effectiveness, or as a warning that the tour boat has arrived. (This operation has been verified with the Coast Guard).

POTENTIAL SPONSOR

Coast Guard

OTHER FUNDING SUPPORT

COST:

CAPITAL

\$10,000

OPERATING

\$1,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Beach access - Concept A & B

DESCRIPTION

Most of the coastal area of the Island consists of a steep escarpment or rocky shore. However, in the vicinity of the wharf (i.e. northern portion of the island) the intertidal zone offers an opportunity for exploration, swimming, walking and tidal interpretation.

POTENTIAL SPONSOR

Saint John Recreation and Parks

OTHER FUNDING SUPPORT

Not required; this is a "passive" activity which does not require extensive infrastructure development.

COST:

CAPITAL

\$2,500

OPERATING

\$200

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Entry Plaza - Concept A

DESCRIPTION

This would consist of a small plaza to receive visitors immediately upon debarkation from the tour boat. The primary purpose of this space would be to orient visitors to the circulation patterns, exhibits and attractions. Flag plaza of each interest group, passport check and map.

POTENTIAL SPONSOR

N.B. Department of Tourism Recreation and Heritage

OTHER FUNDING SUPPORT

Interest groups - for flags

COST:

CAPITAL

\$50,000

OPERATING

\$2,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Reconstruction/Rehabilitation of existing wharf - Concept A and
Concept B

Reconstruction of 19th Century ship - Concept B

DESCRIPTION

Under the boat access scenario it is mandatory that an adequate and safe landing site be provided on the Island, particularly in view of the potential attraction to the elderly. This terminus may also be required to accommodate a variety of boats at different tidal levels.

POTENTIAL SPONSOR

Government of Canada

OTHER FUNDING SOURCES

Government of New Brunswick

COST:

CAPITAL

Concept A: \$500,000; Concept B: \$600,000

OPERATING

Concept A: \$5,000; Concept B: \$6,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Immigration Museum - Concept B

DESCRIPTION

The Immigrant Museum will be devoted to various aspects of history of those immigrants who passed through Partridge Island.

POTENTIAL SPONSOR

N.B. Department of Tourism, Recreation and Heritage

OTHER FUNDING SUPPORT

N.B. Irish Canadian Cultural Association

N.B. Historical Society

COST:

CAPITAL

\$600,000

OPERATING

\$75,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Historic Reconstruction - Concept A & B

DESCRIPTION

This area would provide an important first impression for the visitor upon leaving the entry plaza. One or two period homes from the 1800's could be reconstructed demonstrating the quality of life enjoyed by residents of the time. (Three of four homes would be reconstructed under concept B).

POTENTIAL SPONSOR

N.B. Department of Tourism, Recreation and Heritage

OTHER FUNDING SUPPORT

Irish Community

COST:

CAPITAL

Concept A: \$200,000; Concept B: \$400,000

OPERATING

Concept A: \$10,000; Concept B: \$20,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Multicultural Exposition - Concept A & B

DESCRIPTION

This project will consist of several immigration theme exhibition areas, each of which are sponsored and developed by a different ethnic group with historic ties to the Island. The scale of development may vary from a simple plaque to small building displaying relevant material.

POTENTIAL SPONSOR

N.B. Irish Canadian Cultural Association
Jewish Community
St. Andrew Society
St. Georges Society
Multicultural Association
United Empire Loyalists
Saint Patrick Society

OTHER FUNDING SUPPORT

Not required, this project should become the sole responsibility of the groups involved.

COST:

CAPITAL

\$100,000

OPERATING

\$10,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Quarantine Infirmary - Concept A & B

DESCRIPTION

Reconstruction of the hospital which existed when the Island was used as a quarantine/immigration station. This could either be full or a reduced scale. Interior could be partially completed with a mock-up of beds, etc. or display of appropriate artifacts. Concept B would also include reconstruction of hospital barracks.

POTENTIAL SPONSOR

Saint John Medical Society
N.B. Historical Society

OTHER FUNDING SUPPORT

This project will require support from higher levels of government.

COST:

CAPITAL

Concept A: \$100,000; Concept B: \$300,000

OPERATING

Concept A: \$10,000; Concept B: \$30,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Military Reconstruction - Concept A & B

DESCRIPTION

Rehabilitation of the gun emplacements, observation posts, communication tunnels and ammunition stores. These initiatives could range in scope from refurbishment such that hazards to visitors are eliminated, to full scale reconstruction to a level of historic authenticity. Concept B would also include construction of military museum.

POTENTIAL SPONSOR

Department of National Defence
Royal Canadian Artillery Association (The Loyal Company)
Moosehead Breweries

OTHER FUNDING SUPPORT

Canadian War Museum

COST:

CAPITAL

Concept A: \$100,000; Concept B: \$200,000

OPERATING

\$2,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Genealogy Centre - Concept A & B

DESCRIPTION

Concept A

Provide general research guides - a "how to do it" information package; actual data would not be maintained on site. This type of approach would appeal to the majority of potential visitors to Partridge Island. Most visitors would be amateurs who would seek information on 1) where and how to find genealogical information 2) historical background information about their ancestors and the region in which they lived. This type of service could be most feasible provided along with other services in the visitor orientation centre.

Concept B:

Carefully organize compilation of vital statistical and historical data: birth, baptism, marriage and death records, occupations, military history, other environment, accomplishments, etc. The compilation of genealogical data would be an extensive task, and would require a high degree of networking and coordination with various other organizations. Under this approach, a Genealogy Centre facility would have to be developed. The most appropriate location for the facility would be on the mainland. This location would enable year-round usage.

Discussions with Daniel Johnson, a certified genealogist working in Saint John indicate that there is a strong need for a Genealogical Research Centre in the city. At present, genealogical research can be conducted at the New Brunswick Museum but the resources and hours of the Archives Section are limited.

A location which is separate from other uses would be more conducive to research. Potential locations for the genealogy centre include sites in the downtown, particularly the Trinity Royal area. Adequate parking is of importance due to the long hours of research spent at such facilities. A suitable location may be the UNBSJ campus or possibly the Aitken Bicentennial Building.

POTENTIAL SPONSOR

Various Interest groups
Saint John Heritage Trust

OTHER FUNDING SUPPORT

N.B. Department of Tourism, Heritage and Recreation

COST:

CAPITAL

Concept A: \$10,000 Concept B: \$200,000

OPERATING

Concept A: \$2,000 Concept B: \$50,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

General Infrastructure Improvements - Concept A & B

DESCRIPTION

Provision of utilities and amenities as necessary to support project development; to include: electric power, water, sewage, paths, retaining walls, etc. Concept B would include extensive improvements such as landscaping and parking.

POTENTIAL SPONSOR

Government of Canada

Government of New Brunswick

OTHER FUNDING SUPPORT

COST:

CAPITAL

Concept A: \$100,000; Concept B: \$600,000

OPERATING

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Old Power Plant - Concept B

DESCRIPTION

Landscaping and interpretive signage of the Old Power Plant.

POTENTIAL SPONSOR

N.B. Electric Power Commission

OTHER FUNDING SUPPORT

COST:

CAPITAL

\$2,500

OPERATING

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Tour Boat - Concept A

DESCRIPTION

Provision of a forty passenger vessel, which meets all appropriate regulatory requirements, to transport visitors from downtown Saint John to Partridge Island.

POTENTIAL SPONSOR

Private Sector Opportunity

OTHER FUNDING SUPPORT

Operating subsidies may be required.

COST:

CAPITAL

\$250,000-\$300,000

OPERATING

\$50-\$60 per hour

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Graveyard - Concept A & B

DESCRIPTION

A non-denominational graveyard with appropriate monuments and cast iron fence could be developed.

POTENTIAL SPONSOR

N.B. Irish Canadian Cultural Association

OTHER FUNDING SUPPORT

N.B. Historical Society

COST:

CAPITAL

\$25,000

OPERATING

\$500

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Sick House Reconstruction - Concept A & B

DESCRIPTION

Reconstruction of Sick House used for sick immigrants. Interior could be partially completed with a mock-up of beds and furniture, or display of appropriate artifacts.

POTENTIAL SPONSOR

Saint John Medical Society
N.B. Historical Society

OTHER FUNDING SUPPORT

Federal Government

COST:

CAPITAL

\$250,000

OPERATING

\$32,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Signal Hill - Concept B

DESCRIPTION

Landscaping and signage of Signal Hill, including a signal flag and signal gun.

POTENTIAL SPONSOR

Government of New Brunswick

OTHER FUNDING SUPPORT

Government of Canada

COST:

CAPITAL

\$5,000

OPERATING

\$500

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Marine Museum - Concept B

DESCRIPTION

The marine Museum would consist of various models of immigrat ships, and illustrations of life on board these ships.

POTENTIAL SPONSOR

N.B. Department of Tourism, Recreation and Heritage

OTHER FUNDING SUPPORT

Private Sector

COST:

CAPITAL

\$200,000

OPERATING

\$65,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Observation Tower - Concept B

DESCRIPTION

Development of a lookout point and observation tower located near centre of Island.

POTENTIAL SPONSOR

Government of Canada

OTHER FUNDING SUPPORT

COST:

CAPITAL

\$50,000

OPERATING

Nil

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Look Out(s) - Concept A & B

DESCRIPTION

Interpretation stations with signage, maps and drawings outlining historic naval events in the Bay of Fundy, the Fundy tide, the location of Digby, and shipwreck locations. Telescopes could be coin operated and used to scan the surroundings.

POTENTIAL SPONSOR

N.B. Department of Tourism, Recreation and Heritage

OTHER FUNDING SUPPORT

Royal Canadian Navy

COST:

CAPITAL

\$10,000

OPERATING

\$1,000 for annual maintenance

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Irish Memorial Garden - Concept A & B

DESCRIPTION

Landscaped garden with appropriate flowers, shrubs, trees, arbors, gazebo, walls and other features typical of an Irish garden.

POTENTIAL SPONSOR

N.B. Irish Canadian Cultural Association
St. Patrick Society

OTHER FUNDING SUPPORT

COST:

CAPITAL

\$50,000

OPERATING

Annual - \$2,500

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Religious Service Area - Concept A & B

DESCRIPTION

Provision of an outdoor non-denomination place of worship. Services could be held to commemorate significant historic dates, special events, or if it proves to be popular, a regular Sunday service.

POTENTIAL SPONSOR

Various voluntary groups and religious associations.

OTHER FUNDING SUPPORT

COST:

CAPITAL

\$10,000

OPERATING

\$1,000 for annual maintenance

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Celtic Cross Monument - Concept A & B

DESCRIPTION

Refurbishment and enhancement of the existing Celtic Cross and surrounding area. This would include sandblasting, and repainting of the cross as necessary, improvements to the base area, a small plaque related to significance, dedication reason for installation, etc. and landscaping, access paths, etc.

POTENTIAL SPONSOR

N.B. Irish Canadian Cultural Association

OTHER FUNDING SUPPORT

N.B. Department of Tourism, Recreation and Heritage

COST:

CAPITAL

\$5,000

OPERATING

Negligible

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Interpretation Site - Concept A

DESCRIPTION

Look-off point on west side of Island which provides excellent views and interpretation potential for Fort Dufferin, Saint John West, Carleton Martello Tower, Saint John Harbour, etc. Physical design could range from simple graded pad to elaborate wooden deck.

POTENTIAL SPONSOR

Environment Canada - Parks

OTHER FUNDING SUPPORT

COST:

CAPITAL

\$3,000

OPERATING

Negligible

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Lighthouse (With washrooms) - Concept A

Lighthouse (Without washrooms) - Concept B

DESCRIPTION

This facility exists and will remain when automated operations begin. The lighthouse could provide the focus for a marine/navigation interpretation centre. A retired light keeper could be available at peak periods to tell interesting "sea shanties" or explain the routine/responsibilities of light keepers "before automation".

POTENTIAL SPONSOR

Public Works Canada

Saint John Heritage Trust

OTHER FUNDING SUPPORT

Environment Canada - Coast Guard

COST:

CAPITAL

Concept A: \$25,000; Concept B: \$10,000

OPERATING

\$1,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Natural Area - Concept A and B

DESCRIPTION

This area has the only significant vegetation cover on the island. It is important that these woods remain to provide some protection from the wind to those having a picnic. Interpretation of the history, species and uses of the plants on the island could be displayed through signage.

POTENTIAL SPONSOR

Saint John Recreation and Parks

OTHER FUNDING SOURCES

N.B. Department of Tourism, Recreation and Heritage

COST:

CAPITAL

\$5,000

OPERATING

\$1,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Picnic Area - Concept A & B

DESCRIPTION

The island was a popular picnic site for city residents in the early part of this century. It is important to provide an area for this type of activity to be re-established. A small area with tables, shelters, bar-b-que pits, etc. should be reserved. This site will also act as a place to wait for the ferry to arrive.

POTENTIAL SPONSOR

Saint John Recreation and Parks Department

OTHER FUNDING SUPPORT

N.B. Department of Tourism, Recreation and Heritage

COST:

CAPITAL

\$10,000

OPERATING

\$2,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Large Picnic Area - Concept A & B

DESCRIPTION

An open area suitable for passive recreation, gatherings, group picnics and special events.

POTENTIAL SPONSOR

Saint John Parks and Recreation

OTHER FUNDING SUPPORT

COST:

CAPITAL

Concept A: \$10,000; Concept B: \$15,000

OPERATING

Concept A: \$2,000; Concept B: \$2,000

PARTRIDGE ISLAND PROJECT PROFILE

PROJECT TITLE

Children's play area - Concept A & B

DESCRIPTION

This centrally located area is ideally suited for a playground as it is close to many activity areas and far enough from the water that parents could leave the children for a period of time without worrying about their safety. Key to the success of a development for a family outing is the ability to keep the children amused.

POTENTIAL SPONSOR

Saint John Parks and Recreation

OTHER FUNDING SOURCES

N.B. Department of Tourism Recreation and Heritage

COST:

CAPITAL

Concept A: \$25,000; Concept B: \$35,000

OPERATING

Concept A: \$1,000; Concept B: \$1,000